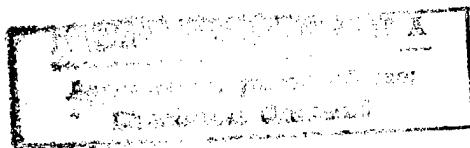


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6 August 1982

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ECONOMIC AFFAIRS**

No. 255

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NATIONAL POLICY AND ISSUES

REPRODUCTION OF RURAL POPULATION DISCUSSED

HK211419 Beijing JINGJI YANJIU [ECONOMIC RESEARCH] in Chinese No 6, 20 Jun 82
pp 51-57

[Article by Chen Du [4453 1653]: "On Reproduction of Rural Population"--an analysis of an investigation report (Note: The investigation on rural birth rate of Hubei Province was made by Comrades Chen Du, Xu Yunpeng, Gu Shengzu, Xie Shaocai, Liu Chenbi, Jing Lin and Zhu Yali. The figures used in this article are quoted from the investigation report.)]

[Text] Engels once pointed out: "Production itself is classified into two kinds. One is the means of subsistence, that is, food, clothing, housing and the production of tools that is necessary for these substances. The second is the production of human beings itself, that is the generating of seed." (Engels: "Preface to the First Edition of 'The Origin of Family, Private Property and the State'" "Selected Works of Marx and Engels," Vol 4, p 2) Among these two kinds of production, the economic circles of our country have made a profound study of the production and reproduction of material goods. As to the production and reproduction of population, we still lack research in this aspect. Now let us start with the investigation data of rural areas and make a superficial analysis of the reproduction of rural population.

In order to study the reproduction of the rural population, we must first study the birth rate of rural areas. Because whether the reproduction type is expanding or simple or reducing (declining), the number of children born by child-bearing women is a decisive factor. Therefore, during July to August of 1981, we investigated five counties, Chongyang, Xianning, Qianjiang, Jiangling and Yichang in the three prefectures of Xianning, Jingzhou and Yichang. According to the unified investigation outline, we went among the peasants of 15 brigades and investigated by way of interview and poll. We selected the investigated areas after considering the varied level and conditions of their economy and birth rate, so as to give a general idea of reproduction and the birth rate of the rural areas of Hubei Province.

I. The History and Present Condition of Rural Population

The history of population reproduction of our country goes back to ancient times. Through investigating reminiscences we could only collect data of the last 70 to 80 years. Now let us observe the history and present condition

of reproduction of the rural population through the figures of accumulated birth rate or lifetime birth rate and the reproduction of population from the investigation data.

Table 1. Accumulative birth rate (this is an investigation made on child-bearing women in mine production brigades of the four counties of Xianning, Qiangjiang, Jiangling and Yidu)

<u>Year of Mother's Birth</u>	<u>Age Group</u>	<u>No. of Mothers</u>	<u>Year when mother starts bearing</u>	<u>Accumulative Children</u>	<u>Average of every mother's</u>		
				<u>Born</u>	<u>Survived</u>	<u>Born</u>	<u>Survived</u>
1952-1961	20-29	425	1972-1981	829	751	2.0	1.8
1942-1951	30-39	304	1962-1971	1442	1042	4.7	3.4
1932-1941	40-49	121	1952-1961	590	475	4.9	3.9
1922-1931	50-59	164	1942-1951	946	717	5.7	4.4
1912-1921	60-69	166	1932-1941	914	588	5.5	3.5
1902-1911	70-79	110	1922-1931	507	297	4.6	2.7
Before 1901	80-	54	Before 1921	346	264	6.4	4.9

(Note: 1. The accumulative number of children born from the age group of under 49 is in fact the number of children still in the stage of pregnancy, because those artificial abortions affected by the policy of family planning were also counted in the statistics. This is a little different to the survival number in population statistics; 2. The accumulative number of children that survived of the age group of over 35 is those who were reared up to the age of 15; 3. There is a big gap between the birth and survival number of some age groups, the reason is to be studied afterwards.)

Generally speaking, the accumulative birth rate figure used here is the accumulative figure of children born by every woman up to a certain point in time. The lifetime birth rate is in fact the accumulated figure of children born by a woman in her entire life. There is no distinction between the two indexes of those who for some reason cannot bear children during the child-bearing period or those who have passed the child-bearing age. The above investigation figures show the condition of reproduction of the rural population: 40 or 50 years before liberation, the population was in a natural birth period, lifetime birth was between 4.6-6.4 and the survival rate between 2.7-4.9 that is to say, a woman bore 5.5 children in her lifetime and reared 3.7 children, so the number of children was 3.5 (born) or 1.7 (survived) more than the parents. The scale of reproduction of population increased by 180 percent (born figure) or 85 percent (survival figure). In the 20 years after liberation (1952-1971) we were still in an unplanned birth period. The accumulative or lifetime birth rate was between 4.7-4.9 and the survival rate was 3.4-3.0. Each woman gave birth to an average of 4.8 children and reared 3.6 children in her lifetime. Although the birth figure is lower than that of preliberation days, the survival figure is more or less the same. The scale of reproduction of population increased by 140 percent (birth figure) or 80 percent (survival figure). The above two figures, 85 or 80 percent have important significance. It is in fact an epitome of population growth in the whole country. In the 31 years after

liberation, the scale of population increased by 81 percent (note: In 1949 the total population was 541.67 million (not including Taiwan Province and the compatriots of Hong Kong and Macau). The net population increase from 1949 to 1980 was 440.88 million). These are basically those born between the 1920's and 1930's and who gave birth and reared the next generation between the 1950's and 1970's, that caused the population explosion in our country.

In table 1, there appears another circumstance in the birth and survival of children born by women in the age group of 20-29. The birth figure of this group is 2 and survival 1.8 thanks to the period of their birth not being too long, the accumulative number of children has been less. What is more, the policy of family planning practiced by the government has greatly influenced them. Blind increase of population has been controlled. Their childbearing chances will be less in the days to come. The reproduction of population is restrained to only one generation replacing the other and may even be reduced. This fully shows that the policy of family planning has played an immense role in controlling population growth, reducing the rural birth rate and transforming the pattern of population reproduction.

In the above we have analyzed the reproduction condition of population by comparing the number of children with their parents. This kind of analysis is not precise enough, because it is affected by the sex structure. In order to eliminate these effects, we must further analyze from the two indexes of rough reproduction and net reproduction of population. The gross reproduction rate mentioned here is in fact the proportion between the daughter generation and the mother generation, while the net reproduction rate is the proportion between the mother generation and the daughter generation after deducting those daughters who died before they reached the age of their mothers when their mothers gave birth to them. From the investigation data, we get the reproduction rate of rural women as follows:

Table 2. Reproduction Rate of Female Population

Age Group	No. of Mothers	Year when Mother starts bearing	Accumulation of girls		Gross Reproduction rate	Net Reproduction rate
			Born	Survived		
20-29	425	1972-1981	364	353	0.86	0.83
30-39	304	1962-1971	581	524	1.91	1.72
40-49	121	1952-1961	285	244	2.35	2.02
50-59	164	1942-1951	429	307	2.62	1.87
60-69	166	1932-1941	430	267	2.59	1.60
70-79	110	1922-1931	236	133	2.59	1.21
80-	54	Before 1921	146	111	2.70	2.06

(Note: 1. In some of the age groups, there is a big difference between the birth and survival number of female children, reason to be studied afterwards; 2. The age group of 20 to 49 have not finished their childbearing, some are in the fertile period. Theoretically, it is not right to calculate the reproduction rate of this age group. But viewed from the policy of family planning, childbearing is strictly controlled, and their is less opportunity

for childbearing; 3. The reproduction of the 20-49 age group is still affected by female children that die in the course of maturing to be mothers. As a matter of fact, the net reproduction rate is possibly less than the table.)

The above table indicates: The gross reproduction rate of the rural population in preliberation days reached as high as 2.6-2.7, the net reproduction rate reached 1.2-2, the average value is 2.5 and 1.7 respectively. The reproduction scale of the daughter generation increased by 150 percent over the mother generation (birth figure) or 70 percent (survival figure). This signifies that in the mother generation, if there are 1,000 mothers who give birth and rear the daughters to become a new mother generation, then there are 2,500 mothers bearing children. Judging from the gross reproduction rate, that is 1,500 mothers more than the previous mother generation, and the production scale has increased by 150 percent. But the daughters cannot all live up to the childbearing age, some of them die young. Therefore, the new mother generation is not 2,500 but 1,700, the production scale has increased by 70 percent.

The gross and net reproduction rates after liberation, during the 1950's (1952-1961 as in table 2) were 2.35 and 2 respectively. Compared with preliberation days, the gross reproduction rate has dropped slightly, but the net reproduction rate is higher, that is, the actual scale and speed of population reproduction is higher than preliberation days. During the 1960's, the gross and net reproduction rates were lower than the 1950's, but the net production rate was similar to preliberation days. Therefore, in the past 20 years, the population reproduction in rural areas has been expanding. During the 1970's a new situation occurred in the gross and net reproduction rates, the figures being only 0.85 and 0.83. The scale of population reproduction suddenly dropped, and both the gross and net reproduction rates were reduced by more than 100 percent compared to earlier years, and the population reproduction transformed from expansion to reduction. Due to the effects of age, sex and habits, the total number of population in the years to come will continue to increase, but in essence, viewed from the inherent developing trend, the pattern of population reproduction is already one of reduction. However, at present this type of reproduction is only a possibility, and it can only be realized in the 1990's, because it will take 23 to 24 years for the daughter generation to be reared to a new mother generation, that is about the year 1993, for the reduced reproduction to be realized.

If we realign the interval of the 20-year group in table 2, and suppose a mother generation of 20 years (according to the investigation we found out: the average marriage age of women in preliberation days was 18.16, in 1949-1979 was 19.38), we can see the development trend of gross and net reproduction rate of four mother generations.

Table 3. The Reproduction Rate of Four Female Generations

<u>Age Group</u>	<u>No. of Mothers</u>	<u>Genera-tion of</u>	<u>Year when mother starts bearing</u>	<u>Accumu-lation of girls born</u>	<u>Accumu-lation of girls survived</u>	<u>Gross Repro-duction rate</u>	<u>Net Repro-duction rate</u>
20-29	425	fourth	1972-1981	364	353	0.86	0.83
30-49	425	third	1952-1971	866	768	2.04	1.81
50-69	330	second	1932-1951	859	574	2.60	1.74
70-	164	first	1912-1931	382	244	2.32	1.49

After regrouping in this way, we can clearly see the trend of transformation and development of population reproduction of the past 80 years. The gross and net reproduction rates of the first generation of mothers are respectively 2.32 and 1.49; the two reproduction rates of the second generation of mothers are much higher than the first, about 2.60 and 1.74; the gross reproduction rate of the third mother generation (the first generation after liberation) is 2.04, much lower than the first and second generations, but the net reproduction rate is 1.81, much higher than the previous generations, the scale and speed of population reproduction reached the peak point. Due to the influence of the implementation of the family planning policy, the two reproduction rates of the fourth mother generation (the second generation after liberation) are 0.86 and 0.83 respectively, much lower than any of the previous generations and so low that they cannot maintain the replacement level.

The analysis of accumulative birth rate, lifetime birth rate and population reproduction rate reveals: The reproduction of rural population of the preliberation period and of the 1950's and 1960's was expanding reproduction. Its scale and speed reached a peak in the 20 years after liberation.

Starting from the 1970's, there appeared a completely contrary situation, the expanding reproduction rapidly transformed into simple and declining reproduction. The scale and speed of population growth dropped to a slow progress. The key to realize this transformation is the policy of family planning. This fully shows that whether or not we carry out the policy of family planning greatly affects the control of population growth in our country. It also proves that those who reckon that the theory of economic development will automatically lead to a drop in population growth and that it is unnecessary to strictly control population growth does not hold water.

2. Factors That Affect the Reproduction of Rural Population

The analysis of the investigation data leads to a conclusion: The reproduction of rural population is changing from a pattern of expansion to one of reduction. The realization of this transformation is a result of various synthetic functions, and it is the policy of strictly controlling the population growth practiced by the Chinese Government that plays the main role. We must be aware that its foundation is not firm and there are still factors that intend a reversion to the old pattern of expansion.

Now let us introduce and make an analysis of these factors:

(1) At present, there still exist factors that stimulate population growth in the development level of the rural economy. Marx once pointed out: "The number of births and deaths, and the absolute number of family members and wage levels, that is, the means of subsistence allotted by various workers form into a reverse proportion. This law of capitalist society would sound ridiculous among barbarians and civilized emigrants. It reminds one of the large amount of reproduction of animals that are weak and always being chased." (Marx: "Das Kapital," Vol 1, pp 705-706, footnote p 706) We found out during the investigation, although the economic development of the rural areas was not "poor to the extent of accelerating breeding," (Marx, ibid.) it is still a far cry from the stage of the reverse proportion of the increase of family members and the increase of income of brigade members. Our investigation figures proved that, at the present stage, the increase of income of rural families is still the stimulus for peasants bearing more children.

- 1) Viewed from the income level, the average is not high. We investigated the income level of brigade members, in the year 1980, the average per capita income (from the collective) was between 60 to 120 yuan. For years the peasants' income in Qianjiang and Yidu counties were not high. In Qianjiang County, from 1970 to 1979 the average per capital income (from the collective) increased from 79 to 130 yuan. As in Yidu County, the average income increased from 58 to 96 yuan. During the year 1981, with the implementation of production responsibility, the income of brigade members was a bit higher, but it was still a long way from being rich.
- 2) Examining the living standard of the brigade member's families, they were basically secure with regard to food and clothing. Among the 692 family units under investigation, 18.6 percent had enough food, clothing, housing and money to spend; 38.15 percent had enough food, clothing and housing but less money to spend; 31.36 percent had food, clothing and housing but no money to spend; 8.96 percent had food and clothing but difficulties in housing; 0.14 percent had food but difficulties in clothing and housing. With regard to food and clothing, we mean a general standard and not a high standard of food and clothing.
- 3) As to housing, the majority of brigade members have spacious brick-and-tile houses to live in. Of the 680 families under investigation, each had an average of 4.56 rooms (not including pigsties and cow-sheds). Those houses that cannot afford shelter from wind and rain no longer exist after liberation.
- 4) From the standpoint of consumption, the peasants' living standard is not high. We investigated 731 families, the ratio of possession of these durable consumer goods was as follows: Each family has 0.07 sewing machines, 0.5 wrist-watches, 0.3 bicycles and 0.3 radios. More than half of those who possess these durable goods are rural cadres and workers, very few of the peasant families have these goods. The broad masses of peasants are still in a state of reliance on necessary means of subsistence.

From the analysis of the above four points, we come to a conclusion, at the present level of development of the rural economy, the peasants are capable of rearing a few children, but not enough for them to transfer from the pursuit of rearing children to the inclination of material civilization and cultural development.

5) The actual condition of the structure of agricultural productive force also stimulates peasants to bear more children. In the present agricultural economy which relies mainly on labor force, the number of family members is intimately related to their income. Among 396 families, we found out, in 1980, 92 percent of 1-2 members' family income was under 100 yuan per person; 26 percent of 3-4 members' family income was over 100 yuan per person (between 100-250 yuan); 31 percent of 6-8 members' family income was over 100 yuan per person (between 100-250 yuan). All these figures show that a small family is not in the advantageous to well-to-do bracket. The more labor force you have, the more income you can gain. This also spurs people to bear more children.

(2) The marriage system and family relations handed down from the old society foster large-scale reproductions of population.

1) For thousands of years there was a popular saying in the countryside "give birth to a noble son in early years" and "more sons, more happiness." People are still affected by the traditional marriage system. Although the government advocates late marriage and late childbearing, young people hastily marry when they reach (or even under) the legal marriage age. Early childbearing is still an unchanged fact. During the investigation we found out, of 354 women who were married before 1949, their average marriage age was 18.16; of 421 women who were married between 1949-1970, their average marriage age was 19.38, only 1 year older than the preliberation days. The law concerning childbirth is: 63 percent give birth to the first child within 2 years after marriage; 90 percent give birth to the first child within 4 years, and the second, third, fourth and fifth children at intervals on average of 3 years, and the sixth and seventh at intervals of 4-5 years. This means if a rural woman gets married at the age of 19 and gives birth to the first child at 21, like those women in 1949-1970, without any birth control, she could bear 5 children by the age of 35, and 7 by the time she was 44. There have been some changes since the 1970's. Due to the influence of the policy of family planning, of 460 married women in our investigation, the earliest marriage age went up to 22.54 and childbearing age up to 25. Every couple is limited to only 1 or 2 children.

There is one thing that merits our attention. In 1980, the new marriage law laid down 20 as the legal marriage age. The late marriage age of 23 advocated in the past is in danger of being eliminated. At present, rural girls request marriage certificates at the age of 20. There is also a trend among the youths to make the optimum marriage age earlier. In Yidu County, we interviewed 118 women about the optimum marriage age. The results were: 25 percent said at the age of 20; 12 percent said 21; 29 percent said 22. That is to say, two-thirds of them want to marry below the age of 22. As to the ideal childbearing age, 46 percent intend to give birth in the first year after marriage and 29 percent in 2 years.

2) Large families are quite popular, small families have not revealed their superiority. As is known to all, the size of a family is closely related to the production of population. Large families inevitably spur people on to bear more children, the happy life of small families shifts people's interest away from bearing children. We investigated 748 families, the situation of the family size was: 2.41 percent had 1-2 members; 52.94 percent had 3-5 members; 39.94 percent had 6-8 members and 5.34 percent had 9-11 members. In actual life, a family of 3-5 members occupies more than half of the rural population. The ideal family structure the peasants expect is not a small family of 3-4 members but a trend of large families of three generations living together. Our investigation among 725 people has proved these facts. In all, 49.52 percent want a family of three generations living together and 41.38 percent want a two-generation family. This is because the two-generation families have a lot of economic difficulties and cannot keep up with their work. As to the three-generation families, the grandparents can take care of the children and feed the pigs and poultry. The number of children born from the three-generation families is more than from the two-generation families. Our investigation on the family structure and number of children in six brigades of Chongyang County shows a mother's cumulative childbearing in a two-generation family is 2.41, while in a three-generation family it is 3.21, an average of 0.8 extra.

(3) Women peasants taking part in agricultural labor and their educational level stimulates population growth. A low educational level is sure to result in a high rate of childbirth. A high educational level can play a role in restraining the birth rate, because an educated woman is willing to accept new ideas and subdue traditional ideas. Of the 707 women of childbearing age in our survey, 42 percent were illiterate, 45 percent had a smattering of education equivalent to primary school level, 9.5 percent were of junior secondary school level and 3.5 percent were of senior secondary school level. Illiterates and semiliterates occupied the majority. Those who actually entered primary schools are in the minority, but there is a great difference in the number of childbirths among them. Among 185 childbearing women, the average illiterate woman's cumulative birth rate was 4.8, the average rate for a woman with primary education was 3.05, and for a woman with secondary education, 1.76.

Very few of the rural labor force transfer to towns and cities or to trades other than agriculture. Even if there is a chance of employment or work in towns, females seldom get an opportunity. In rural areas, there is popularly a saying "half side family," that means men go to work or become cadres, while women stay at home to do agricultural work and rear children. Women are restricted to agricultural labor and seldom have a chance to come into contact with new things, therefore bearing children has become an inevitable trend.

(4) Traditional concepts of childbearing still spur peasants to bear more children.

1) In childbearing at present, there is a strong desire of requiring at least two children among the peasants. Of 728 childbearing women in our

survey, there are 4.81 percent who want only one child, 51.24 percent who want two, 28.43 percent who want three and 15.52 percent who want four.

2) As to the sex, there is still a preference for males and people are less keen for females, and there is a demand for both a boy and a girl. We made an imaginative investigation to comprehend the ideological trend of peasants after having two children. The results were: one-third of 710 peasants after having two sons, still want a daughter; 62 percent of 747 peasants after having two daughters, still want a son. The government has advocated the policy of each couple having only one child, under such circumstances, only a very few, namely 2.21 percent out of 543, want a daughter. The traditional concepts of male superiority over females and a desire for both a boy and a girl are the main reasons for the high birth rate.

(5) The policy of family planning is the key factor for transforming the pattern of population reproduction to one of reduction.

At present, the social economic, cultural, ideological and habitual factors are all possible factors that may stimulate population growth and lead the reproduction of population towards the pattern of expansion. The only way to reduce the high birth rate and restrain the population growth is to implement the policy of family planning. The above data on rural childbirth has proved this point. The historical figures of development changes of Jiangling and Yitu counties have also proved this point. The birth rate of Jiangling County dropped from 40.52 per thousand in 1962 to 14.13 per thousand in 1980. In the last 10 years there were 80,000 less people born than in the previous 10 years. The less number of people born is equal to 10 percent of the population of the whole county. The birth rate of Yidu County also dropped from 40.15 per thousand in 1962 to 14.8 per thousand in 1980. There were 48,000 less people born in the last 10 years than in the previous 10 years. The number of people less born is equal to 12 percent of the county's population.

3. Get a Clear Understanding of the Main Reason That Induces Population Growth and Changes Population Reproduction Towards a Reduced Pattern

We have analyzed the various factors that influence population reproduction. Besides family planning, all the others are factors that stimulate population growth. Where are these factors that stimulate population growth manifested? Why do peasants insist on bearing more children? A popular saying in the circles of population study is: The peasants are mainly seeking for labor force, particularly since the popularization of the agricultural production responsibility system. The fact that more labor force leads to wealth stimulates peasants to bear more children. In the light of the peasants' desire for more children, we investigated 808 people. The results indicate 50.99 percent rear children as insurance for their old age; 24.88 percent for regeneration; 20.67 percent for gaining more labor force and 3.46 for enjoying the happiness of having children. This shows the reason people seek more children, their objective first and foremost is to get insurance for when they get old, second is to reproduce another generation and then getting more labor force. As for those who rear children for the purpose of enjoying family happiness, that is only of little importance.

Care for the elderly. This is the main problem the peasants care about most and also the main problem why the peasants want more children. The socialist system provides young couples with food, clothing and housing and ensures that they live and work in peace and contentment. Because these young people are in their prime and vigorous period, they do not have to worry about the necessities of life in the coming 20 or 30 years. The only problem is the security of their old age, they are elusive and have no idea about the future. Due to various reasons, "homes for the aged" and "households enjoying five guarantees" are not established. Before these problems of old age are solved by society, they can only rely on their posterity. Therefore, although the government advocates every couple having only one child, the peasants still take the way of relying on their posterity to take care of the elderly.

In short, the main thing peasants consider about childbearing is still "more children, more happiness" and "rear children for the purpose of taking care of one in one's old age." If we want to change the peasants' minds in this respect, fundamentally, we need a developed socialist economy and plenty of employment opportunities other than agricultural labor, a high education level, reliable social welfare and abundant subsistence and cultural life. The slogan "development is the best contraceptive method" (a slogan summoned in the 1974 world population conference) is simply the result of all the above conditions. These conditions are still difficult to fulfill in every aspect at present and for a considerable time to come. The only measures applicable to continuously lead the population to simple reproduction or decline are as follows.

- 1) While rapidly developing industrial production, develop agricultural production on a large scale and raise the income and standard of life of peasants as soon as possible. The present development of the agricultural economy has the aspect of raising peasants' income and at the same time stimulating peasants to bear more children. In order to reach Marx's theory of absolute number of origin, family members and the allotted means of subsistence being in reverse proportion, we have to accelerate the development of the agricultural economy. In the light of the population and income increasing in the same direction, we must take measures to stimulate the increase of income and restrain population growth. These measures being generally popularized in the rural areas are called the two responsibility systems, that is, the production responsibility system and the birth responsibility system.
- 2) Persevere in implementing family planning and strictly control population growth. The population problem is a major event that concerns the modern construction of socialism and the improvement of people's life. The party and the people of our country should be sober-minded and understand the importance and urgency of controlling population growth, put it at the top of the list, have a real grasp of the two types of production together and persist in carrying out the principle and policy of family planning. The policy of family planning suitable for rural areas, formulated by the party and government is: Popularize and advocate in rural areas each couple having a single child; as to some masses who have practical distress and need to have a second child, their cases should be approved by the government departments concerned and arranged in a planned way. It is not possible

to have a third child. This policy fully takes into account the basic conditions of our country and the peasants' desire on the childbearing problem, it is absolutely correct, and we must correctly comprehend and conscientiously implement it.

3) Economically, we must create conditions for the well-being of single-child families, set an example and at the same time stop those who take the way of the well-to-do under the pretext of family planning and take the lead in bearing more children. The document of "instructions on further carrying out family planning work" clearly points out: When implementing the production responsibility system, priority should be given to singlechild families in output targets and cultivated land. As for those who do not practice family planning, they should be restricted in these two points.

4) Actively and reliably solve the problem of the security of the old, and establish a system so that those without children can also enjoy mental and material security when they get old. At present, production brigades should do a good job of running "homes for the aged," support the old and educate the young. In the long term, the government can take the county as a unit, levying a very light tax attached to public grain for supporting the old-aged and raise rural old-age welfare funds, accumulate them for a decade or two and then gradually start using them. At the same time, we can carry out insurance and savings for the security of old people in rural areas and start using them when the peasants get old.

4 April 1982

CSO: 4006/543

ECONOMIC MANAGEMENT

TRANSPLANTING ADVANCED DOMESTIC EXPERIENCES ENCOURAGED

Shanghai WEN HUI BAO in Chinese 21 Apr 82 p 3

[Article by Shen Junpo [3476 1498 0980] and Zhong Zhe [6988 0772]: "A Good Way To Improve Economic Results--a Discussion on Transplanting Advanced Domestic Experiences"]

[Text] In his report on government work given at the fourth session of the Fifth NPC, Comrade Zhao Ziyang stressed that the key problem in future economic construction is to improve economic benefits. Indeed, this is truly a profound summation of our experiences. Since we began implementing the spirit of the 3D Plenary Session, there have been marked improvements in China's economic results. This is a major advance on the economic front. However, it should also be noted that the potential in this area is still very great. It is primarily seen in the existence of three noticeable disparities. The first is the gap between our domestic level and advanced world levels. The second is the gap between backward areas or enterprises and advanced domestic levels. The third is the gap between current levels and the relatively high levels attained in the past. In recent years there has been much discussion of the first disparity, the other two not yet evoking much interest. In comparing the level of advanced domestic areas and the average national level, it can be seen that the taxes and interest gained from every 100 yuan of fixed assets is three times the national amount and the productivity of the industrial labor force is two times the national level. If we compare advanced areas to backward areas, the disparities are even greater. Based on analyses, disparities exist between the current level of China's economic results and the fairly high levels attained in the past. This is related to the fact that for a long time economic and technical targets in backward enterprises and areas could not advance. Of course there are certain factors that make comparisons impossible between enterprises and areas and between the present and the past. However, disparities in economic results still exist. As far as the burgeoning television set industry is concerned, in 1980, of 40-odd plants throughout China, one-third netted profits and two-thirds incurred losses. If China's backward enterprises could reach or approach the levels of advanced domestic enterprises, it is certain that we would greatly improve our economic results and increase our national economic strength. Thus, the immediate and urgent task confronting us is how to reduce domestic disparities and improve economic results. It is also a major task in implementing the policy of further readjusting our national economy.

There are many ways to improve social and economic results. The quantity of economic results in an enterprise or area is always closely linked to the extent to which new technology is used and the level of management. The good economic results in coastal cities such as Shanghai are owing to the fact that these cities are able to accumulate, absorb and create much advanced technology and advanced methods of management and administration, as well as to other rational factors. The industrial base is frequently linked with the scientific and technological base. Therefore, we must seek to obtain results from the economic responsibility system and from the economic structure. We should also seek to obtain results from scientific technology, management and administration. We must adopt the method of exploiting potential through more channels. Under present conditions in China, transplanting advanced domestic experiences is an excellent way to get great economic results at a low cost. In essence, it is a social reproductive progress in which scientific technology is put into production as a spiritual product and becomes transformed into a material productive force.

Since the 3D Plenary Session, advanced domestic technology has been transplanted into many enterprises and areas. They have integrated and applied this technology to their own actual conditions, and they have achieved great results. For example, the textile system in Henan integrated their experiences of learning from Shanghai and in 1980, with the hard work of staff and workers, they were able to achieve their best level ever in product quality. While learning from the advanced experiences of neighboring areas, Shanghai was also able to achieve excellent results. People have called this transplanting of advanced domestic experiences "a method for increasing production without increasing investments," "a method for increasing revenue without increasing equipment" and "a practical and feasible method of tapping existing potential."

The transplanting of advanced domestic technology and of advanced methods of management and administration involves not only China's inland areas and backward enterprises but also its coastal areas and advanced enterprises. In inland areas there are raw materials, energy resources, factories and installations. However, owing to historical reasons the levels of technology and management are still low. Because of this, they cannot fully develop the superiority of their own area. In Shanghai and other coastal cities, the level of technology and management is fairly high but their plants and equipment are quite obsolete. Furthermore, they have an insufficient supply of natural resources and energy resources. They must therefore further develop their potential to increase production. Their difficulties are increasing. If we combine the superiorities of both sides and learn from one area's strong points to offset the other's weaknesses, then we can effectively improve the economic results of the whole society and enjoy a common economic prosperity. We believe that, from now on, Shanghai's contribution to the nation should not only be embodied in material products; it should also be embodied in products in the form of knowledge. Shanghai must work steadily and pay equal attention to the export of products and the export of technology. Even for material products it must steadily increase the proportion of medium- and high-grade goods. It must export high-grade, choice and advanced new products, reduce consumption of materials by units and concentrate more intellectual labor. This will be of advantage in resolving the problems in Shanghai itself, and it will make an even greater contribution to the nation as a whole.

ECONOMIC MANAGEMENT

BRIEFS

TECHNICAL ECONOMIC RESPONSIBILITY SYSTEM--It was recently learned from the municipal economic commission that a group of municipal plant units and scientific research units have tried out the technical economic system of responsibility and obtained excellent results. On the whole there are three forms of the technical economic responsibility system. The first is the responsibility system of planned assessment, which was tried out by the Institute of Textile Research. They set quarterly tasks, schedules and plans. They also carried out quarterly assessments, and rewards were given for fulfilling plans. The second form is the responsibility system of project contracts that was tried out by the No 1 Radio Plant and the Forging Machine Tool Plant. They contracted for a complete project and assessed results. Rewards were given for meeting demands. The third form is the responsibility system of assigned tasks carried out by the Bohai Sea Radio Plant. Project tasks were separately assigned to individuals, and rewards were given for completed assignments. After these plant units and scientific research units tried out the technical economic system of responsibility, it accelerated the completion of new products in scientific research both quantitatively and qualitatively. It also inspired enthusiasm and creativity among workers, cadres and technicians. It was of benefit in improving economic results. [Text] [Tianjin TIANJIN RIBAO in Chinese 21 Apr 82 p 1] 9864

CSO: 4006/441

FINANCE AND BANKING

CURRENCY CIRCULATION STATUS, PLANS OUTLINED

Beijing ZHONGGUO JINRONG [CHINA'S BANKING] in Chinese No 9, 4 May 82 pp 1-3

[Article by Planning Bureau, People's Bank of China: "Current State of Currency Circulation and Tasks for 1982"]

[Text] In 1981 the CCP Central Committee and the State Council took a series of major actions to stabilize the economy and stabilize the currency, which have been very effective. However, it is also necessary to realize that hidden dangers to the national economy have by no means been completely eliminated, and the situation of an overly large amount of banknotes in the marketplace has not yet fundamentally changed. In accordance with the need for further reorganization of the national economy in 1982, implementation of the 1982 currency issuance plan decided on by the Central Committee will be a fairly arduous task that should arouse the serious attention of all quarters for continued adherence to the program for currency stabilization, and adherence to economic issuance in order to consolidate and stabilize economic results.

Current State of Currency Circulation

(1) In 1981 the currency circulation situation improved. In 1981 a program for stabilizing the currency was followed, the net amount of currency put into circulation for the entire year being 5.014 billion yuan, 2.835 billion yuan less than was put into circulation in 1980. This reflected the remarkable effectiveness of the further readjustment of the national economy.

The major features of currency circulation in 1981 were as follows: One was withdrawal of currency from circulation through sales of goods. Cash earnings from sales of goods for the year increased by 16.3 percent over the previous year. This was the result of fairly great growth in agriculture and light industry, which provided more industrial goods and non-staple foods for use in daily life to markets, providing a material foundation for increasing withdrawal of currency from circulation. Second was withdrawal of currency from circulation through city and countryside credit. City and town savings accounts increased by 7.16 billion yuan for the year; rural commune member individual savings increased by 5.25 billion yuan; and savings by urban and rural people increased by a total of 12.41 billion yuan. In addition, effectiveness of farm credit was rather good, 33.2 billion yuan of farm credit

being issued for the year as a whole, and 29.6 billion yuan being recovered, the amount recovered amounting to 89 percent of the amount issued, the farm credit recovery rate strikingly increasing as compared with the past several years. This played a major role in the withdrawal of currency from circulation, collecting credit funds, and slowing down pressure on supplies of goods. Third was the comparatively good situation during the first half of last year in withdrawal of currency from circulation. Net currency withdrawal from circulation for the country as a whole amounted to 3.98 billion yuan, 1.54 billion yuan more than during the same period during 1980, and the maximum withdrawal of currency during the first half of any year since the founding of the People's Republic. The fairly good withdrawal of currency from circulation during the first half of the year helped create conditions for release of currency during the last half of the year to meet needs for state procurement of agricultural products without putting much currency into circulation for the year as a whole.

Improvement in the currency circulation situation in 1981 resulted, in an overall sense, from the effectiveness of the Central Committee's actions, the serious attention of leaders at all levels, and efforts by the broad masses of staff and workers throughout the bank. Early last year the Central Committee took a series of actions to reduce the scale of investments in capital construction, controlled the previous year's surplus savings of all units, issued treasury certificates, strictly controlled prices, required those engaged in both domestic and foreign trade to cut back on goods in stock, increased market supplies, and devoted major attention to consumer goods production. All levels of CCP committee and government treated withdrawal of banknotes from circulation as a major matter. The broad masses of staff and workers of banks did a large amount of work in putting into effect the State Council's "Decisions on Genuine Strengthening of Credit Management and Strict Control of Issuance of Currency" winning remarkable achievements.

(2) An oversupply of banknotes in the marketplace continues. Issuance of banknotes was less in 1981 than in 1980, but they were issued when there was already an oversupply of banknotes at the end of 1980. Analyzed in terms of the national economic situation, there is still an oversupply of currency in the marketplace. This is manifested in the following ways: First, the speed of increase in the quantity of currency is greater than the speed of increase in development of production and circulation of commodities. Second, prices of goods have risen somewhat and the difference between list and market prices has increased. Third, the amount of currency in proportion to total retail sales of social commodities still tends to be low. At the end of 1981, the quantity of currency in circulation in the marketplace in proportion to total retail sales of social commodities was 1:6.43. Despite changes in economic development during the past several years, rural practice of various forms of responsibility systems, development of urban and rural collective and individual economies, and the appearance of numerous new factors to increase currency capacity, this proportion continues low. Fourth, the increase in purchasing power of city and country residents has exceeded increase in the amounts of goods that can be provided. In recent years the size of the gap between the society's purchasing power and the quantities of goods that can be provided has annually increased considerably, with the

result that some of the purchasing power cannot be used, causing banks to issue more banknotes.

In summary, looked at in terms of the foregoing, dangers existing in the national economy have by no means been completely eliminated, and the situation of an oversupply of banknotes in the marketplace has not fundamentally changed. As Premier Zhao Ziyang said, "The fairly large issuance of banknotes today still constitutes a hidden danger."

Continued Adherence to Carrying Out a Program for Currency Stabilization

During 1982 the national economy should make steady progress from a foundation of results in continuing to consolidate and stabilize the economy. In no case can we let down our guard as soon as the economy begins to stabilize, setting off a recurrence of the hidden dangers. For this reason, we must continue to adhere to the carrying out of programs for currency stabilization, bending efforts so that the increase in issuance of currency for the year as a whole does not exceed nationally approved plans.

In 1982 national public finances still face difficulties, and in order to assure further readjustment and development of the national economy, banks will have to allot funds to support development of production and to enliven the economy so that industrial units will be able to produce, with all possible speed, more goods to meet demands, increase market supply, and increase the removal from circulation of currency so that the quantities of currency in circulation will gradually correspond to economic development. Consequently, even though banknotes in the marketplace continue in oversupply now, this year the state plans to arrange for increased issuance of a certain amount of currency. This is not only for the purpose of assuring a certain increase in the speed of economic development during the period of readjustment, but is also for the purpose of creating the material conditions necessary for gradual restoration of normality in currency circulation.

The task of making sure that this year's increase in currency will not exceed state approved plans is a formidable one.

First, public finances for this year are still in the red and there is still a disparity between purchasing power and the quantity of goods that can be supplied. This will adversely affect both the disparity in expansion of credit and increased issuance of banknotes.

Second, difficulties in credit balancing are substantial. In this year's credit plan, all categories of savings have been figured very amply and all categories of loans have been figured very closely. Now public finances are very tightly controlled and the clamor for money from banks has become great. Therefore, we must likewise be exceedingly attentive in doing a good job of credit balancing.

Third, the situation pertaining to issuance and removal from circulation of currency during the first quarter of this year was, in an overall sense, rather good, yet insufficiently ideal. Most important were great increases in issuance of cash to rural villages and great increases in bonuses and other payments to individuals.

Particularly deserving of attention at the present time is that some comrades lack sufficient understanding about the banknotes oversupply situation. When they see a reduced issuance last year, they suppose that the marketplace currency circulation situation has been brought in line, and that the number of banknotes is not great. Such thinking is very bad for strict control of currency issuance and vigorous organization of withdrawal of currency from circulation.

However, we should also realize that there are still very many favorable conditions this year for controlling issuance of currency and for organizing withdrawal of currency from circulation.

First, the guiding ideology for economic construction has been further clarified. In his government work report, Premier Zhao Ziyang put forward a 10 part program for economic construction, and pointed out that in future consideration of all economic problems the basic point of departure must be increased economic effectiveness. The National Conference on Industry and Transportation recently convened in Tianjin by the State Council, emphasized that in correcting the guiding ideology in industrial production, economic effectiveness at a solid and unexaggerated pace should be sought. If only all sectors of the national economy strive for economic effectiveness, more and better goods that meet society's needs can be produced, commodity flow can be speeded up, stocks on hand can be reduced, and great savings of funds can be effected to the benefit of a fundamental balance between receipts and expenditures of public funds and receipts and expenditures of credit.

Second, "State Council Notice On Resolutely Stabilizing Market Prices" of 8 January this year set forth 10 regulations, and every province, municipality, and autonomous region people's government actively took action in an effort to stabilize market prices, which made the people of the entire country extremely happy and set their minds at ease. The State Council notice also particularly emphasized that a policy of basic price stability had to be followed in state procurement of farm products, and that increased prices and negotiated prices for procurement in excess of quotas had to be revamped and controlled.

Third, last year light industrial production was good, agricultural product procurement was good, and increase in overstocking of goods was fairly great. During January and February this year, output of light industry continued tremendous growth, and this provided the material foundation for this year's increase in withdrawal of currency from circulation through sales of goods.

Fourth, this year the entire country has launched a struggle to attack illegal and criminal activities in the economic field, and to revamp financial and economic discipline. This will play a major role in increasing public revenues, conserving expenditures, controlling inequitable currency issuances, and stabilizing market prices.

We must fully understand and apply beneficial conditions, eliminate unbeneficial conditions, and take positive action in an effort to assure that increased issuance of currency for the year as a whole does not exceed state approved plans.

Several Jobs To Be Done During 1982

In order to assure the carrying out of State Council promulgated plans for currency issuance in 1982, banks at all levels are to rely closely on local CCP and government leaders, in concert with departments concerned, to take vigorous action in handling as a major task for the bank as a whole the organization of withdrawal of currency from circulation and strict control over senseless issuance of currency.

(1) Positive support to development of production and increase in economic effectiveness to increase the material foundation for withdrawal of currency from circulation. It is necessary to vigorously support agricultural production and to support industrial production of more consumer goods for daily use to meet the needs of society, and to support technological improvements for energy conservation. In the case of both loans of circulating capital and intermediate and short term loans for equipment, attention must be given increased economic effectiveness. Supervision of credit must be strengthened for a genuine change in the former situation of "continued overstocking, continued production, continued state procurement, and continued loans."

(2) Need for positive assistance to the commercial sector in organizing movement of industrial goods to the countryside. During the past several years, both urban and rural purchasing power has grown very rapidly, and rural purchasing power has grown particularly fast, while the supply of goods has been inadequate. Some goods that sell slowly in cities could be sold in rural villages and might even enjoy brisk sales. The commercial sector should be spurred to open channels of flow and following the principle that industrial goods wanted by both cities and the countryside should be supplied to rural villages first so as to increase rural market supplies and increase withdrawal of currency from circulation through sales of goods.

(3) Vigorous development of savings by city and country people and organization of service trade earnings to increase withdrawal of currency from circulation through sales of other than goods. This year purchasing power of society has grown substantially, but the gap between quantities of goods available and purchasing power is still rather large. As a result, the urban and rural savings potential is still very great. Use should be made of favorable conditions for encouraging improvement in the social atmosphere and increasing the interest rate on savings, doing widespread propaganda work, and sensibly readjusting and increasing the numbers of savings network outlets, and increasing quality of service. If a good job is done, great growth can occur in savings accounts, and prospects for fulfillment or overfulfillment of quotas would be good. There is quite a potential for development of service enterprises, and there should be active organization of service trade earnings to increase withdrawal of currency from circulation through sales of things other than goods.

(4) Strengthening of cash management and supervision of wage funds. Cash management is a major effective fiscal and economic system in China. It is an effective measure not only for management of currency issuance, but also a

major technique for carrying out fiscal and economic policies and in maintaining fiscal and economic discipline. Attacks or illegal and criminal activities in the economic field should be closely linked to a major financial inspection for genuine strengthening of cash management and supervision of accounts settlements. Analysis of loopholes in cash management, in conversion accounts, and in final settlements should be done on the basis of major economic cases exposed; the lessons of experience should be exposed; and measures for improvement put forward to strengthen management. There should be strict examination of large cash payments and of remittances of funds between cities and the countryside to put a stop to diversions of funds. Coordination with all specialized banks should be enhanced and inspections of cash management carried out in all units by stages and in groups in a focused way taking account of local situations, the good being commended and the poor being taught to encourage all units consciously carry out cash management regulations.

The 1981 State Council "Several Regulations On Correct Implementation of Awards Systems For Resolute Halt to Reckless Issuance of Award Funds" should be carried out, and supervision of payments of bonuses should be enhanced in active coordination with units concerned. Payments of wages and bonuses to staff and workers must be approved by units concerned, and banks are to supervise payments. When problems are discovered, investigation must be done and reports made.

(5) The work of withdrawing currency from circulation during the first half of the year must be firmly taken in hand. Head office has provided branches in every province, municipality, and autonomous region with the figures for currency to be withdrawn from circulation (or put into circulation) during the first half of this year, and each branch should diligently carry out instructions in light of local circumstances, put forward specific measures for withdrawals of currency from circulation, and strive to fulfill or overfill quotas. Only by striving to withdraw more banknotes from circulation during the first half of the year will it be possible to meet requirements for concentrated issuance of money during the last half of the year, and to take the initiative in assuring fulfillment of this year's plan.

(6) Investigation and study plus all-around reporting must be strengthened. In order to carry out the spirit of last winter's National Planning Conference and the spirit of the recent National Industrial and Transportation Conference convened by the State Council, banks at all levels are to intensify inspection and analysis of the situation pertaining to execution of credit and cash plans. They should grasp new situations and new problems affecting credit balance as well as problems in whether the use of various loans genuinely produce economic effectiveness, organize forces, conduct investigation and study, do reporting on special topics or do overall reporting to the main office or to local leadership organizations, and make suggestions the better to help realize the 1982 national economic plan and the currency issuance plan.

FINANCING AND BANKING

NEED TO LEARN FOREIGN EXPERIENCES IN BUILDING AUDITING SYSTEM EMPHASIZED

Beijing CAIWU YU KUAIJI [FINANCE AND ACCOUNTING] in Chinese No 4, 20 Apr 82
pp 15-18

[Article by He Renyuan [0149 0117 6678] and Yan Deyu [7051 1795 3768]: "Certain Principles for Setting Up a Socialist Auditing System in China"]

[Excerpt] The endeavor to establish a socialist audit consists of efforts to enact an audit law, formulate an auditing system, establish an independent audit agency, build up a contingent of professional auditors, and develop a socialist theory and branch of science in auditing. In short, we can call this an endeavor to build a socialist auditing structure. In order to build a sound socialist auditing structure, we must first make efforts to get a clear understanding of the principle we must follow in setting up such a system in our country.

The "Resolution on Certain Questions in the History of Our Party Since the Founding of the PRC" adopted by the 6th Plenary Session of the 11th Party Central Committee contains profound experiences and lessons drawn from our efforts in socialist revolution and construction. A key point in the "Resolution" is that we must build socialism in a way that "takes into account the Chinese conditions," and in doing so, we must "find a path of advance that conforms to the Chinese reality"; neither can we "copy foreign experiences mechanically" nor can we ignore "the need to learn advanced foreign ideas that are useful to us." The erroneous tendency "to wall our country off to foreigners and reject everything foreign" must be opposed. Efforts must be made to instill this important spirit in all aspects of the crusade for socialist construction. In this connection, the auditing function is no exception.

First, building an auditing system in light of the Chinese conditions means proceeding to build it on the basis of our social system. As a tool to oversee the economic operations, auditing is always affiliated with a specific class. The socialist audit must embody the special spirit of the socialist system, and must be devoted to serving the purpose of strengthening and developing the socialist economy. The socialist auditors must be committed to the thorough implementation of the party's and government's principles, policies, decrees, and regulations and use them as criteria for judging right from wrong; they must struggle resolutely against all forms of corruption and

embezzlement and violations of law and discipline that are harmful to the socialist cause. The fact that under the socialist system, the interests of the state are basically the same as that of enterprises and individuals provides a likelihood for socialist auditors to follow up their inspection and examination of all units with an objective and fair assessment of their economic performances on behalf of the state. If their assessment is unfair, it means that they have failed to live up to the requirements of the socialist system. As for embezzlement and other malfeasances, the socialist auditors must consider it their duty to denounce them.

Second, building an auditing system in light of the Chinese conditions means proceeding to build it on the basis of our economic inspection and investigative work. Although we oppose overly conservative approaches in this regard, we can in no way accept those approaches that disregard the actual groundwork and conditions we have laid. As seen since the founding of the PRC, our accounting, and auditing functions have attentively relied on the leadership of the party to carry out their work in pursuit of the mass line and the party's policies. We must endorse and publicize the positive role they have played in enhancing the socialist cause in coordination with our central task. But we must also take note of serious defects in the economic system of external audits, a system which is far from being able to meet the demands of the current situation. Among the major problems are: (1) A lack of necessary legislation. Although some of our existing regulations stress the need to strengthen the accounting and auditing functions, no conscientious efforts have been made to enforce them for a variety of reasons, and particularly because of the 10 years of turmoil. (2) A lack of a unified agency. At present, the functions concerned with financial inspection and investigation in the departments of treasury and internal revenue, in banks and in enterprises are operating under a "multiheaded structure." Since their staff members are not working under a single command and following different approaches to this matter, they are bound to encounter difficulties in bringing their role into full play in the course of inspecting and examining financial records of enterprises and other establishments. (3) A lack of a professional contingent. The number of comrades responsible for financial inspection and examination in various departments and functions are not far from adequate to carry out this work. Also noteworthy is their high turnaround rate and an acute shortage of well-trained professionals. (4) A lack of centralized administrative leadership. Although much has been done by the Ministry of Finance in this respect, its role in auditing financial records is restricted and limited. The existence of these problems has prevented it from working out an overall plan for the entire work of economic inspection and investigation and for forging a close coordination between different departments and units. Meanwhile, the unavailability of courses in auditing at colleges of finance and economics, and of related teaching materials which must be printed and circulated by publishers, and the failure of our academicians to exchange their views on this matter on public occasions constitute an important factor that has caused our country to lag behind others in developing a branch of science in auditing. This is a matter of nationwide concern which must be resolved in the course of building an auditing system in our country.

Third, the building of an auditing system in conformity with the Chinese reality must be accompanied by a successful and active effort to learn foreign experiences in auditing. The Chinese and foreign experiences are two sides of one coin that are complementary to each other. In view of the fact that our country was once totally cut off in its communication with the rest of the world on this matter, we must consider it particularly necessary to study and learn foreign experiences when our country is considering establishing its own auditing system.

At present, foreign auditing can be generally divided into the following two categories: (1) the Yugoslav bookkeeping system; (2) the capitalist auditing system.

Under the leadership of the Federal Assembly, Yugoslavia has established a social bookkeeping bureau with a wide-ranging power to exercise a close control over the financial operations of all units throughout the country. This bureau has also been placed in charge of external audits of all enterprises in Yugoslavia. The Social Bookkeeping Bureau is also known as an authoritative, independent, centralized and democratic unit agency, whose experiences are worthy of our emulation.

The auditing in capitalist countries excels in the following ways: (1) it is served by specialized auditing agencies and professional auditing contingents; (2) it is based on a publicly recognized theory, standards, and backed up by a comprehensive set of techniques and methods; (3) an increasing importance has been attached to the establishment of internal audit; (4) every enterprise has established a comprehensive and well-disciplined auditing system which has a binding effect on all its subordinate units; (5) it has begun to shift its attention from emphasizing the "protective aspect of the auditing function" alone to emphasizing "both protective and constructive aspects of this profession" or even attaching greater importance to the latter than the former; (6) all auditing personnel must undergo special professional training and severe tests. Generally speaking, they have very high professional knowledge. We must recognize that these qualities are indispensable to any country interested in establishing a sound auditing system no matter what social system it prefers. Of course, as far as the capitalist audit is concerned, we must examine it in a critical way and must consider absorbing those knowledge and experiences that are useful to us.

As stated above, the principle we must follow in setting up the auditing system is that we must apply Marxism-Leninism and Mao Zedong Thought as a guide in building an auditing system on the basis of the Chinese conditions and in coordination with foreign experiences. An auditing system to be built in accordance with this principle must contain such special qualities that symbolize:

(1) Class character which is devoted to glorifying the characteristics of the socialist system, upholding the leadership of the party, enhancing the implementation of the party's principles and policies, and serving the interests of the working class and the working people as a whole.

(2) Scientific character which is devoted to creating an auditing theory, system, and method on the basis of combining the application of the Chinese experiences in financial inspection and investigation with that of foreign experiences in auditing.

(3) Popular character which is committed to develop the auditing work in keeping with the mass line and to follow up professional auditing with massive inspection and investigation in a well-organized way.

(4) Authoritative character which is devoted to strengthening the stature of auditors and creating a perfect audit law so that a powerful auditing agency staffed with an adequate number of well-trained professional auditors can be established to keep a close watch over the economic performances by all enterprising units.

9574
CSO: 4006/450

MINERAL RESOURCES

BRIEFS

NEI MONGGOL GOLD OUTPUT--By the end of June, Ulanqab League in Nei Monggol Autonomous Region overfulfilled its semiannual gold production target 10 days ahead of schedule. Qahar Youyi Zhong Banner in Ulanqab League is one of the five places throughout the country where the annual gold production is over 10,000 liang and the purity of gold is among the highest. By the end of June, the banner had turned out over 6,000 liang of gold, a 100-percent increase over the corresponding 1981 period. The production cost of 1 liang of gold has decreased from over 870 yuan in the past to 367 yuan in 1982.
[SK202220 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT
19 Jul 82 SK]

CSO: 4013/126

INDUSTRY

CIVILIAN USE OF MILITARY TECHNOLOGIES URGED

Tianjin KEXUE XUE YU KEXUE JISHU GUANLI [SCIENCE AND MANAGEMENT OF SCIENCE AND TECHNOLOGY] in Chinese No 6, 1981 pp 12 - 13

[Article by Tang Ding [2768 0002], Third Ministry of Machine Building Research Office: "Discussion of Transfer of Military Technologies"]

[Text] How to transfer military technologies to civilian use the better to serve the national economy is a major question deserving exploration during current readjustment.

In order to develop their national economies, many of the countries of the world have given attention to the transfer of advanced military technologies to civilian use to promote rapid development of the national economy. During the early 1970's, America's great armament race caused inflation within the country and severe unemployment, which delayed development of civilian production technologies. In order to extricate itself from a difficult position, the United States government thereupon adopted a policy of transfer of military technologies, mobilizing several hundred scientists to study the problem of how to make the transfer. The American National Air and Space Administration also produced a "Technologies Transfer Plan." As a result, numerous sophisticated technological results were shifted into civilian enterprises where they produced tremendous technological and economic results. Practice has demonstrated that the transfer of military technologies to the civilian sector is an inevitable trend in the development of science and technology, and is an important means of strengthening the relationship between national defense construction and national economic construction.

China's military industries long ago set up their own independent systems, which have made major contributions to national defense construction. However, in the former unitary ordnance production structure, war industries and civilian use were mutually separate and isolated from each other with the result that many new technologies, new techniques, and new materials that could have been transferred were not promptly spread to the civilian sector. One can only say that this was a loss.

As a result of long building of China's military industries, they possess a definite superiority in skilled personnel and technologies. They have a large amount of equipment that is fairly complete in its variety, and performance is

of the finest; techniques are relatively advanced; technical forces are plentiful; and in the development and production of atomic technology, artificial earth satellites, the launching of intercontinental ballistic missiles, and in aircraft, ships, electronics, and conventional weapons, they have made tremendous achievements. These circumstances demonstrate that the military industry sector possesses ample technological conditions, and it should become a major base for development of new technologies; it also has a bounden duty to transfer and promote new technology in the civilian sector to serve the national economy.

Since the Third Plenary Session [of the 11th Party Central Committee], the military industry sector has carried out a policy of military - civilian linkage. It has readjusted its service orientation, and while giving priority to fulfillment of military research and production duties, it has used every available means to develop civilian goods. This effort has been accompanied by technological diffusion and exchanges in many fields, with numerous military industry and research and designing technicians going into civilian enterprises to gain an understanding of technical difficulties and help solve problems. Some military industrial units have opened their doors to the assignment in their plants of representative from civilian enterprises, taking the initiative in explaining and giving briefings on new techniques and new technologies to achieve some preliminary transfer and promotion of technologies, benefits from which have begun to be felt. In terms of experience, such transfers of technologies not only help the civilian sector, but are also extraordinarily beneficial to the military industry sector in learning from the civilian sector to improve their own knowledge and technology. Furthermore, it does not cost much money and brings great benefits. It is a fine means of advancing development of science and technology and increasing growth of the national economy.

The three general ways in which the country's transfer of technologies has been done are as follows:

1. Transfer of a Portion of Military Production Capacity to the Production of Civilian Goods

During peacetime, military production capacity cannot be fully used. Thus, idle plants and equipment can be used to build production lines for civilian goods, the manufacture of civil aircraft, merchant ships and other electro-mechanical products that people need in their daily lives such as bicycles, sewing machines, desk clocks, radios, television sets, recorders, electrical appliances, steel windows, etc. Some superior quality products selling for low prices have now entered the international market. In addition, the military sector uses some of the large specialized equipment it possesses to process metal doors and windows, house frames, pilots compartments, and large castings and forging work for transportation equipment, as well as other products needed in modern construction in the civilian sector. Some enterprises have also provided for the use of the civilian sector large pieces of experimental equipment such as electronic computers and wind tunnels.

2. Transfer of Some Research and Design Personnel to Provide the Civilian Sector With Technological Service and Technological Support

Technicians have been provided the civilian sector for products and equipment that were relatively difficult to design, to set up research on civilian goods to establish design organizations, and to develop new civilian products of superior performance, that are structurally advanced, and are new and original in style. Military industry design forces have already begun to accomplish technological reforms for industries such as light industry, textile, and chemical industries. Last year defense industries in Sichuan Province signed 1,000 agreements with light industries and textile industries for the manufacture of more than 4,400 pieces of special purpose equipment, and to undertake the manufacture of more than 40 million yuan worth of replacement parts. The Sanjiang Machinery Plant several times sent technicians to the Wuliangye Alcohol Plant to gain an understanding, finally designing and manufacturing mechanized, continuously operating, yeast manufacturing equipment, which solved difficulties in yeast making techniques encountered in expansion of production of one of the country's famous alcoholic beverages, "Wuliangye," and increased both the alcohol production rate and the quality of yeast made. Many famous distilleries in the country such as the Maotai Distillery placed orders for this equipment, and now 111 of them have been produced to make a contribution in changing the several thousand year old antiquated yeast making techniques of the distilling industry. Since last year the Wangjiang Machinery Plant has developed 247 light industrial machines of 56 different kinds for the tobacco, tea, plastics, leather, rubber, paper making, and home appliance industries, including production lines for reproduction of tobacco sheets, and infra-red dryers for the tea industry, the first such developed in the country.

Military industry research units also made achievements in support for food and light industries. The Aviation Machine Power Institute sent more than 30 noted engineers and assistant engineers to use advanced military industry technologies and equipment to successfully develop China's first completely automatic bread production line with everything mechanized from the addition of flour, mixing, raising of the dough, cutting the dough into chunks, kneading, forming loaves, putting it into the ovens, rising again, and baking to coming out of the oven, cooking, and wrapping. Operated by 13 people, it daily produces bread from 7.5 tons of flour, producing an average of one (weighing 2 liang) loaf every second. Comrades in food industry enterprises praised them saying, "Greenhorns in the bread industry solved a key problem that insiders had not been able to solve."

3. Transfer of the Fruits of Military Science and Technology

Examples have been many of the transfer to civilian use of the fruits of military industry science and technology. For example, conversion of aviation engines to gas turbines for use on land, which can be used as ground power equipment. They use many different kinds of fuel, and are highly efficient, portable, and easy to operate. Now one kind of turbine engine and two kinds of turbo-propeller engines have been converted for use as land gas turbines for use in the petroleum industry's electric stations or water flooding, where they have demonstrated the power of new technology. After having used them, oil field comrades believe

turbine engines possess three advantages in water flooding. One is that during power outages, early water flooding may be done, with not only no decline in output, but consistently high output being maintained. A second is that power sites can be selected as water flooding requirements dictate. Third is the fairly high degree of automation making for ease in control. Currently departments concerned in the country are in process of organizing research on the expanded uses of gas turbines in industry, ships, railroad transportation, and other applications. Another example is the aviation power machine plant designed marine model engine which, because of the use of new materials that make it an excellent product, seven times broke the world record and twice won the national championship in a air model competition during the last two years. The 10 cc nautical model engine won the national silver award.

Electronic technology, which has been used in military radar and radio communications, now serves many products in the light industrial market, as for example, the large and medium integrated circuits used in color television sets, the micro electrical components in recorders, and the button-size batteries used in electronic watches.

The various electrical machines, instruments, and fuel pumps with which aircraft are equipped are now being gradually transferred to cranes and automatic equipment used in the mining, light and textile, and chemical industries.

Titanium alloy metals formerly resulted from research on materials done by the national defense sector, and have now begun to be used as structural materials in civilian aircraft fuselages. Recently the Aviation Materials Research Institute used such materials to develop a titanium alloy knee joint for the treatment of almost 100 infirm people. After being fitted with titanium alloy knee joints, not only could they walk with steady steps but were also able to dance gracefully.

Nuclear energy power generation, application of isotopes, use of artificial satellites, and aviation telemetry and remote sensing have been used in geodetic surveys, geological surveys and prospecting, and in oceanic surveys, making very great progress.

Additionally, in the process of developing new products, some military industry units have used a series of new management techniques such as "planned inspection and evaluation techniques," "key process line methods," "network analysis," "systems engineering," "value engineering," and "comprehensive quality controls" gaining some experiences. These management techniques are now in use in individual industrial sectors, and it is anticipated that they can greatly increase management levels in enterprises.

Though the transfer of military technologies has just begun, tremendous advantages have already become apparent, and excellent results have been obtained. One is the increase in output and the increase in output value of light and textile industries. For example, after the automated bread production line went into operation, within a year an output value of more than 400,000 yuan was created. After one filter zhuangjieji [5944 2234 2894] went into operation, annual output value increased by more than 600,000 yuan. After a tobacco sheet

production line for reproduction went into production, annually 150 tons of tobacco ends that could be used to fertilize the fields were recovered, and 300,000 medium grade cigarettes could be produced for a net annual profit of more than 600,000 yuan. Two is increase in quality of goods and improved competitiveness of goods in international markets. An example was "Laoguang" brand files, which could not break into international markets because there were no testing techniques to measure their performance standards. After the Wangjiang Machinery Plant provided file testing machines, which demonstrated their fine performance, 400,000 of them were exported last year for the first time. Three, as a result of the tempering they received through experience with civilian goods technologies, military industry technicians increased their own knowledge and skills. For example, designers in an aircraft design institute themselves drew up a "three dimensional limited component analysis program," which was used in geological prospecting. They deeply realized that the technical difficulties for numerous civilian goods are considerable, that the civilian sector likewise has numerous advanced techniques that deserve conscientious study, and that in the process of transplanting and diffusing only through mutual study and reciprocal impetus can the techniques and technologies of military industry itself be consolidated and developed. Four is increase in economic effectiveness.

In summary, transfer of military technologies to civilian use holds extremely great potential and huge technical and economic value. It should be made one of the extremely important policies for the country. It is recommended that national units concerned strengthen leadership in this regard, break through the old rigamarole, wipe out the boundary line between military and civilian, carry out mutual military and civilian cooperation for mutual benefit, and apply advanced military technologies to the national economy. All military industry departments should work from a foundation of investigation and research to formulate plans for the transfer of military technologies, for active participation by the civilian sector, and for vigorous cooperation. They should formulate economic policies that encourage transfers of military technologies, and employ methods of signing technical service cooperation agreements, the transfer of possession of technologies, contracting, and joint operations so that effective mutual assistance and cooperation will take place between the military and the civilian. If this work is done well, inevitably it will give impetus to improvements in national economic development and scientific and technical levels to make a contribution to the building of the four modernizations.

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INDUSTRY

BRIEFS

LIAONING INDUSTRIAL OUTPUT--Shenyang, 24 Jun (XINHUA)--Liaoning Province, one of China's major heavy industrial centers, recorded an 8.3 percent increase in industrial output value in May over the same month in 1981, according to the Provincial Statistical Bureau. The province also turned over 9.3 percent more profits to the state for the same period. From January to May, annual output quotas were met for 61 of 80 major industrial products, and output of 59 products rose over the same 1981 period. Planned targets were met for coal, crude oil, natural gas and electricity. Increases were registered in such products in short supply as soda, cement, plate glass and plywood. [OW241255 Beijing XINHUA in English 0720 GMT 24 Jun 82 OW]

PRODUCTION OF BETTER GOODS--Beijing, July 5 (XINHUA)--China's textile industry must manufacture more varied, cheaper and better made goods to meet the needs of urban and rural consumers, delegates to a recent national conference said in Dalian, Liaoning Province. The country's textile industry has been growing fast since 1976, according to conference participants. It registered a 125 percent increase in 1981 in terms of output value over 1976. Output of cotton-polyester fabrics increased by more than 80 percent in the 3-year period from 1979 to 1981. As a result, each Chinese bought an average of nearly 10.3 meters of cotton cloth and cotton-polyester fabrics in 1981, compared with 7.6 meters in 1976. However, some textiles, particularly cotton-polyester fabrics, are overstocked, delegates reported. This has resulted from the pursuit of profits and output figures by some enterprises to the neglect of designs and varieties, they said. To solve the problem, they urged textile enterprises to produce cheaper and better cotton-polyester fabrics for the rural market and add varieties, colors and designs for the urban market. They should also improve quality and packaging, and increase varieties and designs to raise the competitiveness of Chinese cotton-polyester fabrics on the international market. [Text] [OW060811 Beijing XINHUA in English 1232 GMT 5 Jul 82]

MACHINE-BUILDING QUALITY CONTROL--Beijing, 9 Jul (XINHUA)--A mass organization specializing in quality control in China's machine-building industry was set up at a four-day meeting ending today. The China Association of Quality Control in Machine-Building Industry, whose president is Yang Keng, vice-minister of machine building industry, will conduct academic research,

summarize and publicize achievements, train personnel and disseminate knowledge. The purposes of the organization are to improve the quality of products of the machine-building industry, increase variety and upgrade quality control for better economic results of machine-building enterprises, Yang Keng said at the closing session of the meeting this afternoon. Under the Ministry of Machine-Building Industry, there are about 10,000 enterprises employing five million people, which produce more than 28,000 varieties of products, according to Vice-Minister Yang Keng. Now the ministry's major concern is to get everybody involved in the quality control drive, he said. From now on to 1984, the association will undertake researches on 13 major scientific items, including quality control in the development and designing of new products. The association also plans to run three quality control sessions, in the second half of this year, including one for enterprise managers and other leaders. Swedish experts will give lectures at one of the sessions. [Text] [OW091405 Beijing XINHUA in English 1232 GMT 9 Jul 82 OW]

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CONSTRUCTION

GUIDANCE FOR NEW RURAL CONSTRUCTION GIVEN

Beijing JIANZHU XUEBAO [ARCHITECTURAL JOURNAL] in Chinese No 4, 20 Apr 82 pp 1-7

[Article by Feng Hua [7458 5478]: "Build Modern, Highly Cultured New Socialist Villages and Towns"]

[Text] In December 1981, the National Construction Commission and the National Agricultural Commission jointly held the Second National Rural Housing Construction Work Conference in Beijing. This conference was held with the permission of the State Council at an important time when the rural economy was taking the lead and going into the ascendant; and a new situation of peasant house construction was taking place. The conference conscientiously studied the new problems posed by the building of houses in rural villages, concentratedly discussed matters in terms of programs and policies, organizational leadership, planned construction, and management rules and regulations, adopted measures, and directed peasant house construction toward a new and higher stage of development. The conference noted that since the Third Plenary Session of the 11th Party Central Committee as a result of the implementation in villages of the party's various policies and the development of agricultural and industrial sideline occupations, peasant income has everywhere increased and now that the broad masses of peasants have enough to eat and enough to wear, their needs have become increasingly diverse. Not only have they demanded improvement in living conditions, but they have also demanded an increase in business, cultural, sanitation, and public welfare facilities and this has ramified into overall rural building issues. It was in these new circumstances that the State Council clearly pointed out the need to proceed from the overall situation in rural development, making peasant house construction work a part of planned overall village and town construction, gradually building China's still rather backward villages and towns into modern, highly cultured new socialist villages and towns. This was a decision of major significance. It both reflected the direction of history's advance and reflected the aspirations of the countless millions of peasants. At the same time it also pointed toward the vast vistas in development of new socialist villages. The greatly significant decision has produced extremely far reaching effects historically on China's rural construction.

Flourishing Development of Rural Housing Construction Is a Prelude to Tremendous Changes in the Appearance of China's Rural Villages

China's rural villages were formed on a foundation of a small scale agricultural economy. Their layout is disorderly, their structure loose, their equipment simple and crude, and their houses dilapidated. As production has developed since founding of the People's Republic, old houses everywhere have been improved and new houses built. Nevertheless, in an overall sense, the change in appearance of rural villages has not been great. The rural villages in many places are the same old villages they always were. Since the Third Plenary Session [of the 11th Party Central Committee], spurred on by the rapid development of the rural economy, house construction in rural villages has surged like a spring tide, suddenly breaking through many years of oppressiveness. A house building mania such as has never occurred before is taking place in China's rural villages. "In home after home materials are being prepared, and in village after village excavation is underway." Such a description is not exaggeration at all. This activity has been characterized in the following several ways:

First is a huge scale of great strength and impetus. In the four year period 1978 to 1981, a total of 1.5 billion square meters of new housing was built in China's rural villages. During the two years of 1978 and 1979, between 200 million and 300 million square meters of new housing was built annually. During 1980 and 1981, annually between 500 million and 600 million square meters was built. In this way, our country of 800 million peasants had an annual average increase of almost 2 square meters of construction area within the short space of 4 years, each household averaging an increase of one small room. This was a tremendous achievement. Peasant investment in the building of new houses was also rather substantial. In 1978 it was on the order of somewhat more than 3 billion yuan; in 1979 it was somewhat more than 6 billion yuan, and during 1980 and 1981 it reached about 10 billion yuan. Now peasants annually spend more than 10 billion yuan annually on construction of new houses in vigorous demonstration of the increased economic strength of rural villages. This is the result of correct implementation of the line, the programs, and the policies of the Third Plenary Session.

Second, in rich and populous areas, new houses stretch everywhere, and the look of every village is one of newness. Even in places where economic conditions are fundamentally relatively poor, no small amount of new house construction has taken place. Formerly in the beautiful and richly endowed area south of the Yangtze River, thatched houses were everywhere. "When the wind blew, the roof might blow away; when it rained, they might leak; and during drought, they might catch fire." Now, everywhere there are new farmhouses of "red brick with green tile and whitewashed brick, with cement beams and glass windows." Northern Jiangsu, northern Anhui, eastern Henan, Western Shandong, and northern Shaanxi, which have historically been relatively poor, have fought a battle to free themselves during the past 2 years. "When the peasants have money and grain, they hurry to ready materials to build new houses." In 1980, Yan'an Prefecture lined 22,000 caves of various kinds with bricks and stones. In Gansu Province where

economic conditions had also formerly been relatively poor, in recent years many new houses have been built from the vast expanse of the Hexi Corridor 1,000 li across to the enchanting Longnan mountain region. In 1980 alone, 9 million square meters was built, a rarity down the ages.

Third, housing quality has gone from low to high; styles have become more and more numerous and increasingly tasteful. An overwhelming majority of rural houses in the past had adobe walls, thatched roofs, and paper windows. Today most newly built farmhouses have walls of brick or stone, tile roofs, and glass windows, and some have small structural members made of concrete and steel doors and windows. Styles have also become increasingly diverse. There are single story houses, cave dwellings, and multi-storied houses. In the past, peasants felt storied houses were inconvenient and unsafe. During the past several years, however, after trial building and trying out of such houses, they have gradually become accustomed to them and they have summarized several advantages they possess as follows: They require little land, are well ventilated, withstand use, and save on lumber. In rural villages today, and particularly in places where land is scant relative to population, storied houses are being built increasingly. In 1980, 45 percent of the 37 million square meters of farmhouses built in Zhejiang Province were storied houses.

Fourth is building of homes through mutual help for mutual benefit. Formerly public ownership was emphasized in the building of homes with the result that collective resources were depleted with no concurrent real benefits for commune members. During the past several years diverse formulas have been used in building houses in a seeking for truth in facts, reliance being placed on the masses' own strength, with mutual help for mutual benefit in the building of homes. Results have been very good. Now largely the following several methods are used. One is for a commune member to build his own house by supplying the funds himself and getting the materials himself, with everyone helping with the construction. Another way is to club together to accumulate funds in voluntary association to form a house construction fund group with everyone building in turn. Still another way is to build for oneself with public assistance. In this method the commune member gets the funds and the materials himself and then, depending on collective economic conditions, communes and brigades provide varying degrees of support in funds, materials, manpower, and transportation, property rights to the newly built house belonging to the commune member. In the case of households enjoying the five guarantees [childless and infirm old persons who are guaranteed food, clothing, medical care, housing, and burial expenses by the people's commune], communes and brigades guarantee construction. This method of building by oneself with public assistance is the one most commonly used today and the way of building a house that the masses most like. It both fits in with the level of economic development of an overwhelming majority of rural villages at the present stage in China, and it also embodies the superiority of the socialist system. Yet another method is used as well. In places where the collective economy is solid, leadership teams strong, and commune members agreeable, houses are built collectively, and after construction they are either rented to commune members or sold to them at a discount. As a result of the many ways of building houses, the enthusiasm

of both the collective and individual commune members has been greatly aroused and the pace of farmhouse construction hastened. In the 6 year period 1975 to 1981, Jingshan County in Hubei Province built a total of 11,545 houses, and during the short space of several months between winter transplanting in 1980 until spring farming in 1981, it built 6,410 houses. This amply shows the power of policies. Particularly heartening has been the fairly rapid improvement in living conditions of peasants in some poverty stricken areas. For the past several years the Yimeng mountain region of Shandong Province had more than 50,000 hardship households, but what with the "collective lending a hand and individuals turning a hand," every household now lives in a new house.

Rural Construction Is in Process of Moving in the Direction of All-around Development

During the past several years, a new trend has developed in rural construction, namely that the construction of new rural dwellings is being done hand in hand with the building of cultural, educational and medical facilities, business services, and other public utilities, impelling villages and towns as a whole to move in the direction of all-around development.

(1) Economic development has given impetus to the flowering of rural cultural enterprises. During the past 2 years, as the rural economy has developed more than 3,000 rural market town cultural centers have come into being in China's rural villages. These cultural centers, collective recreational, educational, science popularization, and sports bodies meet the diverse needs of the broad masses of peasants for a cultural life. Mass cultural activity arenas are now being built. In Changshu County, Jiangsu Province, 506 villages have established clubs, libraries, newspapers, television, exhibitions, and lectures, and they have organized irregular ball competitions and performances. The peasants warmly call the clubs "peasant homes." Development of rural cultural activities has brought stability to the social order. When peasants finish work and students get out of school, they have a place they like to go, each person doing what he wants. Gambling, arguing, causing disturbances, and such bad conduct have greatly decreased. Development of rural cultural construction plays a major role in satisfying the peasants' healthy spiritual life, in improving the social atmosphere, in nurturing moral sentiments among the young generation, and in popularizing scientific and cultural knowledge.

(2) The building of rural medical and health endeavors has developed very rapidly. A rural medical and health network to serve rural villages containing 800 million peasants has been built throughout the country. More than 50,000 communes in the country have built 55,000 hospitals, and more than 90 percent of the 700,000 production brigades in the country have established clinics and health stations with varying facilities, which are not only able to diagnose and treat common illnesses, but some are also able to do abdominal surgery. Establishment of a rural medical network is playing a tremendous role today in the development of rural medical and health endeavors to protect the health of the broad masses of peasants.

(3) Convenient and rapid transportation is a requirement for advancement of rural economic development and for linking cities and countryside. In recent years, the rural road network has also developed fairly rapidly. Today more than 90 percent of commune locations are served by all-weather automobile roads. Accompanying increase in peasant contacts with each other has been the appearance of automatic telephones in some rural villages. Jiaxing County in Zhejiang Province already has 640 units. When peasants have something to say, they need only dial a number to be connected, a great convenience in communications.

(4) Rural public utilities are gradually being built. Drinking water is a big problem in rural villages. At the present time in many villages individual households draw their water from wells, ponds, rivers, or lakes. Such antiquated ways of getting water waste a lot of human labor, are unsanitary, and frequently spread diseases. Recently some places began to build centralized facilities to provide water, which have been much welcomed by the peasants. In Hebei Province, more than half of the 190 production brigades in Lecheng County have built standpipes and are using running water.

(5) The build-up of rural energy resources has taken new strides. In China's rural villages, stalks and stems of crops and firewood account for 90 percent of the fuel used in daily life. Direct burning of stalks, stems, and firewood on a large scale is a backward way in which to use energy that not only wastes energy but also destroys the normal material cycle between the soil and farm crops bringing about a decline in soil fertility. In order to upgrade rural energy resources, great development has taken place in many places during the past several years in use of methane gas. Today 6.5 million methane gas pits exist throughout the country, and 30 million people living on farms use methane. Use of solar energy has also progressed with some places installing solar energy bathhouses and some manufacturing solar energy stoves, which both save on firewood and are convenient.

(6) Development of business and service enterprises has been a major factor in strengthening town and village vitality. In recent years a new dynamism has appeared in this area. In many villages and towns, accompanying the burgeoning of country fair trade has been an increase in the construction of small shops, small inns, small restaurants, and such diverse service facilities. Some traditional regional snacks, well-known tidbits, or famous dishes have seen continuous revival in some places, and services that the masses enjoy hearing and seeing have reappeared. Accompanying rise in peasant living standards has been a constant increase in the demand for photographers in rural villages, and rural villages today are beginning to build photographic studios. With the arrival in the countryside of television sets, radios, sewing machines, and bicycles, rural repair industries have also come alive.

(7) Improvement in the living environment have begun to arouse people to be concerned. Formerly China's rural villages did not much care about poor cultural, sanitation, or environmental conditions. In recent years, accompanying the building of houses has been attention in some places to

improving the living environment. The general way this has worked has been to shelter people and livestock separately, followed by the accumulation of nightsoil at fixed sites and disinfection of toilets. This produced conditions for construction of drainage ditches and organizing beautification through the planting of greenery. In Chongqing County in Sichuan Province, some rural villages planted large numbers of fruit trees and bamboo groves in front of and behind their houses, and some of them built pools and flower beds in their courtyards. They harmoniously interwove trees, flowers, fruit, and water with their dwellings to create rural garden homes each with their individual ambience.

Rural villages are the dwelling places for the broad masses of peasants, and they are also the bases for agricultural and industrial sideline production. Rural village construction's progress in the direction of overall development reflects the objective laws of development of rural construction. Formerly our work was limited solely to the building of rural houses per se, and there was no thought given rural village development as a whole. This was a limiting factor of historical conditions of the time, which no longer is able to meet the needs of developing circumstances. Developing circumstances require that we broaden our horizons and do overall planning of village and town construction, taking all factors into account. This is an inevitable trend in economic development and is also an urgent need as a result of the daily improvement in the material and cultural life of the broad masses of peasants.

Building of Modern, Highly Cultured New Socialist Villages and Towns Is a Formidable and Glorious Historical Task.

China has more than 5 million villages and 53,000 market towns. The building of such a large number of villages and towns into modern, highly cultured new socialist villages and towns is an extremely formidable historical task. In order to know how to plan and build requires a clear blueprint, and we have to have a stage by stage, step by step overall conception for implementation. It is also necessary to have some workable measures to provide a realistic and effective impetus.

(1) China's rural villages have now broken through the single-crop agricultural situation. The appearance of integrated agricultural, industrial, and commercial operations, and the diversification of peasant needs in their material and cultural lives has inevitably required acceleration of all-around building of villages and towns. Not only is improvement in living conditions and the living environment required, but also required is the building of good roads, convenient and speedy communication links, adequate supplies of water and electricity, and complete social services. Also needed is greater enjoyment of urbanized civilization, and enrichment of rural culture, and educational enterprises. In rural villages today, some peasants have already begun to be dissatisfied with the simple requirements of having clothes to wear, food to eat, and a place to live; they demand to study culture, science, and technology, and they want to be a part of cultural and sports activities or even to travel away from their villages. The developing situation requires that we grasp village

and town construction as a whole, gradually change the backward rural scene, and steadily increase the degree of modernization and civilization. This is the glorious task that history has bestowed upon us.

Rural and town construction will have to be done under the guidance of the overall program for building of a material and spiritual civilization, begin with rural development as a whole, consider as a whole the comprehensive development of towns and villages, and build as a whole. We are building new villages and towns under new historical conditions. The small scale rural economy of the past with its "to work at sun up, to market when the sun is overhead, and to bed at sunset" has become history. From the very beginning of our work guidance process, this point should be extremely clear, and it is on the basis of this overall train of thought that we must consciously give direction. Of course the pace of construction must proceed from realities, action being taken gradually as conditions permit. There is an old saying that "Unless one takes a lot of steps, it will never be possible to walk 1,000 li." By maintaining a steadfast direction and moving ahead step by step modern highly civilized new socialist villages and towns will steadily begin to appear across the 9.6 million square kilometers of China's soil.

(2) The Farflung Rural Villages and Market Towns Must Be the Focal Points For Village and Town Construction

Rural market towns are centers for several villages. Foreigners call them "rural centers," which is the right general idea. Rural market towns play an effective role for surrounding villages as models, in promoting advancement, in providing service, and in transmitting. In terms of linking city and countryside, they play a role as bridges and bonds. Rural and town construction must focus on market towns making them into collection and distribution centers for farm products, hubs for the exchange of products between cities and the countryside, centers for farm product processing industries, and positions for transmitting advanced science and culture to rural villages. The flowering of construction in the farflung rural market towns possesses extremely important significance for overall urban and rural development. China is a land with large population relative to cultivated land in which a large amount of surplus agricultural labor must inevitably result in the wake of agricultural modernization. If a program for digesting them locally is adopted through large scale development in the farflung rural market towns of labor-intensive trades and industries, the opening of all kinds of service enterprises, vesting rural market towns with a permanent magnetism and attraction for people to engage in production locally and settle down locally, not only will it be possible to take advantage of China's huge manpower resources to speed development of the national economy, but it will also be possible effectively to control the size of cities, and help to reduce gradually the three great differences between cities and countryside. Looked at in long range terms, the focus on development of rural market towns is a strategic task that not only can give impetus to a gradual change in the situation in the farflung rural villages, but can also help speed the process of blending cities and countryside.

(3) Hold Firmly to Correct Policy Guidance and Avoid Repeating the Lessons of History

In the process of development, China's village and town construction has gone through various ins and outs and ups and downs. The basic reason for this has been insufficient study of our own national circumstances, not proceeding from reality, raising some overly high slogans, and taking some precipitous steps, with the result that events ran counter to expectations and goals were not attained. In a country as vast as China, the rural villages are a boundless sea. Village and town construction is something that the state cannot undertake and cannot afford either. It is necessary, under guidance of the party, to proceed from a foundation of the development of production and to rely on growth of the collective economy of communes and brigades plus the enthusiasm of the broad masses of peasants to take the road of self-initiated action in building villages and towns. It is not possible to seek state investment, but rather to rely on accumulations from one's own labors. All that is needed is adoption by the peasants, who are gradually becoming prosperous, of appropriate policy guidance and encouragement, themselves pooling funds or providing needed labor to build their own villages. China's peasants have such a traditional virtue. Village and town construction bears on all trades and industries. One should not fire all arrows at once or rush headlong forward, but rather gradually move forward in an orderly way, doing only what one is capable of doing, gradually building bit by bit over a period of time in accordance with the level of development of production and the extent of prosperity. The scope and pace of construction at any particular time has to be commensurate with financial and material resources that can be provided at the time; there can be no acting with undue haste. The objective of struggle should be a firm one, and the steps in attaining it should be taken on a realistic and reliable basis. In the process of construction, serious attention should be given the sensible use and reform of the original village or town; there can be no undertaking full-scale construction or large scale razing and rebuilding. These are phases that people are accustomed to using, and they are not a mysterious philosophy. However, it is precisely on this issue that we have not been very clear in the past, have taken detours, and have paid a price. "Past experience, if not forgotten, is a guide for the future," and now that village and town construction has been put on the agenda, circumstances are very good. Under these new conditions, we must be even more certain to act prudently and try to avoid repeating the lessons of history.

(4) Give Strict Attention to Good Planning and Persevere in Use of Plan Guidance in Construction

In some places nowadays there are villages and towns in which planning and construction is fairly good, but these are an extreme minority. For the country as a whole, an overwhelming majority of villages and towns do no conscientious planning, and some are in a state of building blindly. During the past several years numerous villages and towns have built quite a few houses, but for lack of planning, layouts are disorderly and they have been built helter-skelter here and there. Seizing the opportunity to do a good job of planning is a priority matter for village and town

construction. This conference asked that all jurisdictions devote 2 or 3 hours to working out plans, and this is an important decision. Village and town planning is on a large scale and covers a wide area requiring increasing refinement. First, planning on land use has to be done with the designation of functional areas guarded from random building and arbitrary occupation. Next come the drawing up of detailed village and town plans in accordance with the principles of advantages for production and convenience in living. The general requirements are production zones and living zones with a certain distance maintained in between them to form a relatively independent yet mutually related whole with no intrusions of one into the other. Road directions, slope, curve radius, and width should be laid out in accordance with topography and terrain features with no insistence on uniformly intersecting streets. Insofar as possible, commuter transportation should avoid passing through residential zones, and public construction should be relatively concentrated, both as a convenience to the masses and to form political and cultural activities centers for neighborhoods. Full attention should be given the planting of greenery, and planting of trees to produce woodlands should be encouraged beside rivers, beside roads, in front of and behind houses, and on odd bits and pieces of land. For villages and towns that engage in county fair trade, places where peasants can trade should be planned. China's rural villages have 37,890 markets, and most peasant trade is conducted from stands set up on both sides of main roads, which congest and interfere with traffic. When planning, places for county fair trade should be provided, and some small shop fronts built. Planning and layout should strive to reflect local characteristics. There should be no "row after row of houses," or "row upon row of storied buildings," everyone of them looking alike, dull and boring. Ours is a country with a long history and many nationalities in which construction in different areas and among different peoples has its own individual styles and characteristics. In the north, the "compound with houses around a courtyard," with its serenity and comfort, is favored even today by the peasants. In the south, construction is slim, graceful, and dispersed to form a style of its own. In the northwest loessland area, cave dwelling construction into the sides of hills with a view outward is also very imposing. China is a vast land in which the mountain and river landforms everywhere are ever changing, rich and varied. Happily, many existing villages and towns made use of terrain and topography for a flexible layout to create a scenic environment. We must absorb the fine traditional layout techniques to enrich our own thinking about planning and layout, adapting general methods to local situations for a sensible layout. For example, in areas laced with waterways or traversed by streams, the waterland character should be reflected. In mountain area, the mountains should be used as a natural feature to create a landscape in which the highs and the lows alternate to reflect the characteristics of mountain villages. In plains areas too, the benefits of planning should be borrowed and layout methods used to break up dullness and monotony. Rural village construction differs from urban construction, and one should not simplistically apply urban plans mechanically. In rural villages, as far as the eye can see there are mountains, rivers, and the land. All construction and facilities should blend with the surrounding field environment and the natural scenery so that the building of China's rural villages will be interesting and varied. By way of guiding village and

town planning, this conference discussed and passed "Principles of Village and Town Planning" to provide some basic data for the use of all jurisdictions in undertaking village and town planning.

(5) Painstaking Design For the Gradual Creation of a Construction Style for China's New Socialist Rural Villages

Technically speaking, rural village construction design is a little simpler than urban construction design. Nevertheless, in the number of elements that must be taken into consideration, it may possibly be somewhat more complicated than the design of urban construction. Rural construction design requires taking into consideration farming, forestry, livestock raising, sideline occupation and fishery production requirements, so simple mechanical application of urban construction design forms will not completely solve rural problems. Rural construction also requires fresh local characteristics. Not only will different areas differ in their flat surface layout but in the handling of empty spaces as well. This means that in the selection of construction materials and construction methods there will be many different requirements. Continuing and carrying forward the advantages of traditional dwellings and creating construction designs that are practical, economical, and are liked by the peasants is no very easy matter. Thorough investigation and study should be done for innovation and creativity on a foundation of carrying on traditions. These aspects all require our efforts. Experiences have shown that plans designed as a matter of course are not necessarily extremely welcomed by the peasants. As guidance for rural village construction designs, during the past 2 or 3 years, CCP Central Committee and State Council leadership comrades have many times pointed out that all levels of construction design departments are to provide a group of outstanding plans for rural construction. Last year a national rural village dwelling design competition was held with excellent results. Preparations are being made for a future campaign to create outstanding designs for various kinds of public construction that will concentrate intelligence from every quarter and, from a foundation of the summarization of experiences, provide some outstanding designs for rural villages and town construction that will gradually create a new style for rural village construction in China.

(6) Promotion of Experiences in the Organization of Construction to Assure Project Quality and Reduce the Peasants' Burdens

Nowadays when many houses are being built in rural villages, the peasants themselves have people do the construction, entertaining them with food and drink. This is a very great burden, yet there is no assurance of quality, and accidents frequently happen. When commune member Hu Jushang [5170 1565 1424] of Shuangyu Production Brigade in Lingguan Commune, Qidong County, Hunan Province built a house, he spent only slightly more than 1,100 yuan for cement and structural materials, but used 3,000 jin of grain for food and more than 1,000 jin of grain for alcoholic beverages, plus 140 cigarettes, spending more than 1,300 yuan, far exceeding the cost of materials for building the house. Some commune members built houses in Daqiao Commune, Qiyang County, Hunan Province, but on 30 October 1980 their houses collapsed crushing to death nine people because building techniques had been faulty.

When a commune member in Lingguan Commune, Qidong County built a house, he installed a large beam weighing more than 800 jin in a hollow wall, which caused the house to topple over injuring 22 people. In recent years, the Caoping Production Team in Yichun City, Jiangxi Province, and the Mengmiao Commune in Yancheng County, Henan Province assembled the five trades to build houses for peasants and to build service facilities in country fair towns. During the busy season in farming, they were excused from farming, and during the slack season in farming they built houses too without being given any banquets by the peasants and without being paid any gratuities when the main house beams were erected. Less work and fewer materials were required than had the peasants built the houses themselves, and quality could be guaranteed too, something the peasants welcomed. Rural villages in Yiyang Prefecture, Shandong Province used specialized contracting in building houses, the contract price per room being 50 to 60 yuan, a saving of 30 to 40 percent as compared with the peasants themselves having someone build a house. This specialized contracting method has several advantages, one of which is that it lightens peasants' burdens. A second is no disorderly rounding up of workforces; and a third is assurance of quality and progress. Guiding rural building construction holds bright prospects for our construction departments and is also a glorious and unshirkable duty for us.

(7) Adaptation of General Methods to Local Situations, Getting Materials Locally, and Solving the Problem of Construction Materials Needed for Village and Town Construction

Quantities of building materials needed for village and town construction are large, and a program of reliance on the masses, self-reliance, and adaptation of general methods to local situations to get materials locally must be adhered to, making full use of local resources and materials to gradually solve village and town construction needs. Mountain regions should encourage much use of stone, and the loess highlands should encourage cave dwellings, adobe brick and such raw soil construction. Suburban areas should encourage greater use of industrial wastes. In short, whatever is available locally should be used without any rigid emphasis on the use of brick and tile. Even bricks and tiles should be improved through development of cinder blocks and cement tiles. In addition, substitute materials should be vigorously developed. Use of steel instead of wood is an effective way of conserving lumber. During the past several years Jiangsu and Zhejiang provinces have produced a large number of steel rod reinforced concrete peasant house components for a big saving on lumber. The combination steel house frame developed by the Beijing Capital Steel Works was light in weight, easy to assemble, and welcomed by the peasants who vied with each other to buy them. Promotion of rural villages of steel reinforced concrete components and steel components not only saves materials and guards against fire, rotting, and insect pests as well. Additionally, it helps expand rural markets and causes large scale withdrawals of currency from circulation. In one prefecture in Jiangsu Province, production of peasant house components resulted in the withdrawal from circulation of almost 100 million yuan. It has been estimated that were construction materials such as structural components, glass, metal fittings [nails, wire, hinges, bolts, locks, etc.] and paint assembled in large quantities and shipped to the countryside,

within a year at least several billion yuan of currency would be withdrawn from circulation. This holds very great significance for enlivening rural markets and stabilizing the economy.

(8) Conservation in Land Use For Village and Town Construction Out of Consideration For Posterity

China has a large population relative to cultivated land, and as construction continues and population increases, this conflict becomes increasingly conspicuous. Over the past more than 20 years China's cultivated land area has decreased by 500 million mu, which is the same as an annual loss of the cultivated land area of Fujian Province. Such a large quantity is extremely alarming. Of course reasons are many for the decrease in cultivated land area; however, in recent years loss of control over land taken for the building of houses in rural villages has been a major reason. We should not blame the peasants too much for this situation, but should rather first blame ourselves for having seen the situation late, for not having formulated necessary land management regulations, and for not having promptly provided leadership, causing some hiatus. This conference zeroed in on existing problems, drafting "Management Regulations on Land Use For the Building of Village and Town Houses." It is anticipated that once issued, arbitrary occupation and indiscriminate use of cultivated land will be brought under control. In a report to the Fourth Session of the Fifth National People's Congress, Premier Zhao Ziyang noted that "To intensely cherish every inch of land and equitably use every inch of land should be our national policy." In village and town construction, out of consideration for posterity we must perseveringly carry out this important policy.

(9) Actively Foster and Strengthen Technological Strength to Serve Village and Town Construction

In the past people did not attach great importance to rural construction supposing that technologically there was not a great deal to be done. Therefore, for a long time there have been no specialized technological forces engaged in this work much less a launching of scientific research into it. In reality, rural construction is a field awaiting development with many problems in planning, design, construction, research, education, and construction materials requiring research. Take planning for instance. Rural dwellings serve the two functions of production and living, and rural market towns have features of both cities and rural villages. Rural construction and the modernization of agriculture are closely related. Doing a good job of planning requires coordination of numerous disciplines. Unless serious attention is given the training of skilled people for this purpose, our villages and towns cannot be well built.

Nurturing and training of village and town planning and construction talent will require that many paths be followed to solution. One practical way is to transfer from among existing project technicians some mainstay cadres to act as seeds. Another way is to operate training classes in institutions of higher learning concerned. Yet another way is to run pilot projects organizing rotational training and the nurture and strengthening of technical

forces in the course of actual work. However, looked at in long range terms, special classes in village and town planning and design will have to be established in institutions of higher learning concerned for the training of specialized personnel skilled in the building of villages and towns. To a very large degree, the standards for village and town construction will be determined by the quality of training given. In development terms, the issue of personnel training must be placed in an important position.

(10) The Building of Organizations Compatible With Duties and Strengthening of Organizational Leadership

Village and town building duties are very heavy; policies are very strong; and the area involved very broad. Specialized organizations are required with responsibility for the organization of leadership, coordination and construction in order to give impetus to the work. For a long time in the past, village and town construction was not being attended to by anyone, and this has hurt, to a certain extent, development of village and town construction. This conference summarized the experiences of the past, proposing the following: Someone in charge of village and town construction at every level, counties being the focal point. Unless counties act, no matter what is said, nothing will be done. All counties having construction commissions or construction bureaus should devote attention to village and town construction as a principal task. Those who have neither should establish village and town construction management organizations and gradually begin work. This is an extremely important matter. Following a summary of experiences on rural construction in some countries, the United Nations wrote a report titled, "Success in Rural Construction Is Determined By a Proper Organizational Structure," which seems very reasonable.

(11) Use of Demonstrations As a Means of Directing Village and Town Planning and Construction

Village and town construction has three comparatively obvious features as follows: one is the large area involved; two is the peasants spending money themselves and building themselves; three is construction standards, components, and form have their own requirements so there should be no forced uniformity. Given these conditions, how to give effective and accurate direction in accordance with the requirements of material and spiritual civilization is a problem awaiting exploration.

A look at experiences in some places shows that the organization of pilot projects, the use of representative examples to provide guidance, and demonstrations and guidance are workable methods. "It is better to see once than hear a hundred times." The peasants are very practical. In rural villages, a representative example frequently causes a sensation, objectively serving to attract and educate people. The power of representative examples is a soundless call to action, and frequently once something has been done at a single point it arouses a whole area. Results are vastly different than from simple lecturing or a hard sell. Demonstration of representative examples is both a good way in which to attract peasants and publicize experiences, and is an effective means of directing work.

During the past few years many places have given serious attention to pilot projects, which have played an active promotional and guiding role in village and town planning and construction. In future, village and town construction will have to be developed in an overall way. Not only will there have to be painstaking organization of pilot projects, but pilot project work will have to assume a leading position, experiences gained being used in giving overall direction. Additionally, in the pilot project process, work quality will have to be steadily improved and every effort made to avoid formalism.

Generally speaking, the following three points deserve serious consideration:

- (1) The kinds of pilot projects will have to be diverse, each of them having their own characteristics. There can be no limitation to a single form. For example, for villages there should be village pilot projects, and for towns there should be town pilot projects. Mountain regions, plains, and areas laced with waterways will have to have pilot projects that reflect their characteristics. Minority nationality areas will also have to have pilot projects that reflect the characteristics and lifestyles of individual minority nationalities.
- (2) Experiences in pilot projects should not be made categorical. Representative example experiences are precious and, generally speaking, reflect the laws of development of things, standing for the direction of advance. Nevertheless, the experiences at any given pilot project are produced under certain specific conditions and frequently contain certain limitations. Consequently, one positively cannot cast in concrete the methods used at a pilot project and apply them mechanically everywhere.
- (3) The form of representative examples will depend on internal elements and on the perfection of experiences. It will depend on the accumulation of practical experience and there can be no shortcuts.

(12) Study and Borrowing of Beneficial Foreign Experiences in the Building of Villages and Towns to Give Impetus to Development of Our Village and Town Construction

Village and town construction problems are increasingly attracting people's attentions throughout the world, but this is not something that has happened suddenly. It has a deep political, economic, and social background. Real life has made people increasingly understand that cities and rural villages are mutually linked, inseparable parts of a whole. Past neglect of rural development has led to a pernicious bloating of cities that has brought about a series of serious social problems. Today many countries have already realized that "rural development was and still is the real key to progress." As a result they have adopted a series of integrated plans such as "comprehensive rural development plans," "social area development plans," and "integrated urban and country planning" etc., as matters of policy, and they intend to push forward with coordinated urban and rural development. This is an important trend. During last August and October, two international academic discussion conferences were held in Beijing. One of these was the "Discussion Meeting on Rural Dwelling Construction in the Midst of Change" sponsored by the Akahan [phonetic] Fund. These two academic meetings also focused on village and town planning and construction. Delegates to the conference from various countries pointed out that rural development bears not only on technical issues, but as a result of administrative, economic, and social methods "promotes non-agricultural activities, increases rural

income and employment, guides the planning of rural public works, provides social services and places of entertainment, and promotes development of rural cities and towns." The conference asked personnel engaged in rural construction to "place an overall concept on a broader theoretical and practical foundation." It particularly asked architects to broaden their horizons and to understand sociology, psychology, planning science, futurology, and environmental science, to understand local traditional history and culture, and to change the former sole emphasis on construction of large and medium size cities to the neglect of rural construction. These concepts are a definite inspiration for us. We should begin with a summarization of our own experiences and go on to borrow and refer to some good foreign methods in the course of practice, steadily increasing and improving them thereby gradually forming our own program for the building of rural villages.

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CONSTRUCTION

NEED FOR, MEANS OF ECONOMIZING ON CEMENT USE OUTLINED

Beijing WUZI GUANLI [HANDLING OF GOODS AND MATERIAL] in Chinese No 4, 25 Apr 82
pp 12 - 13

[Article by Zhong Huanyu [6988 3562 6276] and Liang Shanben [2733 0810 2609]:
"Take a Serious View of Economizing on Cement"]

[Text] Cement is one of the major materials used in capital construction. In recent years because of the considerable gap between supply and demand, the contradiction has sharpened to become a conspicuous problem in national economic construction. Take capital construction this year, for example. Cement centrally distributed by the state has been able to satisfy only about 82 percent of actual requirements, and this does not include the cement required for the building of small projects with funds provided by individual areas or units. When the amounts used for production, maintenance and repair, and other purposes are added to this, the cement gap becomes even greater. As a result, how to actively study and solve the cement gap has become a major situation bearing on increasing economic effectiveness and accelerating construction.

"Broadening sources and reducing the flow" is the basic program for solving the cement supply shortage. By so-called "broadening sources" is meant efforts to increase output through expansion of new cement output capacity. Since the Third Plenary Session of the 11th Party Central Committee, the CCP Central Committee has intensified development of construction materials industries like cement, a fairly tremendous increase in the ratio of investment taking place year after year so that this industry, which has been in a weak position for a long period of time, will be able gradually to meet economic construction needs. However, building cement plants with an annual 500,000 ton output generally requires as much as 100 million yuan in investment and 4 to 5 years time. If we rely solely on this means to solve the cement shortage problem, the distant water will do nothing to slake present thirst; obviously it will be of no help in solving existing problems. Some people have suggested imports, but importation of 1 ton of cement costs 240 yuan. Never mind whether or not the country has that much foreign exchange; even if it has, this does not make economic sense, nor is it a workable course. Consequently, basing ourselves on doing a good job of domestic production simultaneous with taking firm hold of "reduction of flow" in vigorous conservation of cement is the only realistically effective way of gradually solving the conflict between supply and demand in cement.

There are very many ways in which to economize cement. The potential is great and if done correctly an annual saving for the country of a million or even several million tons of cement is entirely possible. Experiences in some areas show that economization of cement can begin in the following several ways: First is strengthening of management to reduce waste. A general situation of waste exists in our use of cement. In all of the links of hauling, loading and unloading, storage, and on-site mixing for use there are losses. A genuine strengthening of management in these regards could effect an extremely great saving in cement for the country. In the case of the hauling, loading and unloading of bagged cement, for example, as a result of poor management, no strong sense of responsibility, and a broken bag rate, losses run to more than 10 percent. Even if figured at only five percent, the annual amount of cement wasted could approach 1 million tons. Secondly, a great amount of loss results from disregard of scientific storage and failure to figure the prescribed amounts required at the time of use. Were effective measures to be taken, as for example promotion of the use of bulk cement and a strict economic responsibility system in the process of hauling, loading, and unloading; strengthening of warehouse management to achieve proper piling and use; and strict institution of a system of issuance and withdrawal for use of fixed amounts, etc., the waste of cement in hauling and use could be reduced to the minimum. From this action alone, an annual saving of between 1 and 2 millions tons of cement could be realized.

Second is promotion of the use of a dessicant. When pouring concrete, mixing in a proper amount of dessicant is an effective way in which to improve construction quality, economize cement, and lower costs. This is widely done in economically advanced foreign countries. It has also produced fairly striking economic results in China since the 1970's when used in some industrial and civilian construction. Between December 1978 and the end of 1981, the Baotou Steel Works used lignin calcium sulfate dessicant to mix 1.03 million cubic meters of cement for a saving of 21,400 tons of cement and a saving of 905,000 yuan of capital. As of October 1981, China's largest hydro-electric construction project, the Gezhou Dam had used a total of 1,925 tons of lignin calcium sulfate for an 83,740 ton saving in cement, and a 4.51 million yuan saving in funds. At Shanghai, Beijing, Jiangsu, and Heilongjiang, wherever concrete has been poured a dessicant was used for fine technical and economic results. It has been calculated that for each ton of lignin calcium sulfate dessicant used, the cement saving is between 20 and 40 tons. Currently China has an annual lignin calcium sulfate dessicant production capacity of 40,000 tons. Were it to be promoted for use, annually almost 1 million tons of cement could be saved. However, because our publicity and promotion, organization of production, and supply work for dessicant has not kept apace, the amount of dessicant promoted for use nationally is still less than 10 percent of the total quantity of cement distributed, so it is easy to see that the potential for cement economies is very great.

Third is development of powdered coal ashes for all around use. Use of powdered coal ashes as mixing material in cement and mortar is also remarkably effective in saving cement. Pertinent data shows that between 10 and 20 percent finely pulverized coal ashes may be used when mixing cement, and that for every ton of finely powdered coal ashes used, 0.7 tons of cement can be saved; when used in mortar, 0.75 tons of cement can be saved. In addition cement costs decline by

about two percent. When pouring cement in large form work, Tianjin Municipality experimented with the use of powdered coal ashes, which a project quality inspect certified workable. The Beijing No 3 Building Project Company had been a cement deficit user, losing as much as 20 percent of its cement in a year. Since 1978 they have mixed powdered coal ashes into the mortar for about a 10 percent saving in cement annual for the past 4 years. This shows that active use of powdered coal ashes plays a great role in economizing cement. China has an abundant supply of powdered coal ashes, annually discharging more than 30 million tons, less than 10 percent of which are being currently used. Less than one percent are used as a mixing material in cement, so a total of 90 percent are not used. Were this portion fully used, prospects would be bright.

In the foregoing we have presented only several major ways in which to save cement from which it may be seen that the potential for economies is great! If we take firm hold of this economization link and do a truly good job of using the aforementioned ways, that would be equivalent to the country producing another several million tons of cement! This would not only greatly ameliorate the current conflict between supply and demand in cement, but would also save large amounts of construction capital for the country and save time in economic construction. This is a matter of such great significance!

It is worth pointing out strongly that, in national terms, the task of saving cement has not yet attracted sufficient serious attention of all levels of units concerned, and has not yet been placed on the leaders' daily agenda. As a result the work has not been thoroughly done. Some comrades frequently pay a lot of attention to having many sources of supply, but give little attention to management. They little realize that doing a good job of management and effecting savings themselves constitute a very great source of supply! Not long ago leadership comrades in the Central Committee noted that every available means should be used to increase sources of supply of cement, and a major strategem in this all available means was economizing! Consequently, increased understanding about saving cement and strengthening of leadership has become the crux of smooth performance of this task. Lumber has also been in very short supply during the past several years, but very great achievements were scored in the use of steel to replace wood. One major experience in doing this was leader taking personal charge at all levels. The same has to be done in order to save cement. Full play of the role of research units and scientific and technical personnel concerned is a major aspect of economizing use of cement that cannot be ignored. In recent years the use of additives to cement and mortar has developed fairly rapidly, and applications of research on dessicants, in particular, has been outstandingly effective in improving the properties of concrete and saving cement. As work steadily develops in depth and breadth, study of pertinent applied technology has to take the lead. Further summary of the country's experiences in using dessicants, study of advanced foreign techniques, and formulation of our own dessicant quality standards and limits on use have become urgent tasks in the general promotion and use of dessicants. Simultaneously, finding effective technologies to economize cement requires widespread organization of technical intelligence exchange. Personnel concerned in construction units can also run various kinds of training classes to make them understand clearly the properties and characteristics of various additives (including dessicants), when they are used and how they are used both to spread

the information and to guard against accidents occurring when they are mixed in. In addition, research on comprehensive use of powdered coal ashes, on volcanic ash, pumice, and cangue as sources that can be used to produce clinker-free or virtually clinker-free cement should also be actively pursued. In short, the fruits of scientific research should be translated into productivity with all possible speed using applied technology in saving cement for getting cement.

In addition, while intensifying political and ideological work, we must also diligently put into effect economic policies to reward savings, institute strict economic responsibility systems, closely link the interests of the country, enterprises, and individuals, and promote lasting and pervasive carrying out of the work of economizing cement.

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FOREIGN TRADE

HEILONGJIANG'S WAY OF USING FOREIGN CAPITAL DESCRIBED

Beijing ZHONGGUO JINRONG [CHINA'S BANKING] in Chinese No 7, 4 Apr 82 pp 41-42

[Article by Cui Guangcai [1508 1684 2088] and Wang Peng [3769 3403]: "Certain Questions Concerning the Use of Foreign Capital"]

[Text] The utilization of foreign capital plays a positive and important role in developing our nation's economy for the acceleration of the four modernizations drive. A problem, however, presently exists within our nation: carrying out the four modernizations drive, on the one hand, requires massive funding, while on the other hand foreign capital has not been put to use very well. Below we discuss some specific problems concerning the use of foreign capital based on concrete practices in our Heilongjiang Province.

How To View the Problem of High Interest Rates in Using Foreign Capital

The problem of interest rates on loans is an important issue concerning the use of foreign capital. Loans in the world's money markets are characterized by high and floating interest rates brought about by an imbalance in the economic development of Western nations, varying degrees of inflation, wide gaps between favorable balances and deficits in international payments and foreign trade, frequent changes in the specific value of each nation's currency, and other factors. Our nation practices a socialist planned economy. The national economy develops in proportion and according to plan, currency is relatively stable, and for many years our nation has practiced the policy of low interest rates on payments. Many people are not inured to the high and floating interest rates of foreign capital, so it is important that we have an appropriate view of the problem of interest rates of foreign capital, otherwise it will hinder us from better utilizing foreign capital.

In borrowing foreign capital rather high interest must be paid. This has indeed increased the economic burden of the loan agencies, but this is not to say that foreign capital cannot be put to use. Although interest on it is high, it is also a small part of the earnings produced by using foreign capital. Putting it to use is appropriate so long as comparatively good economic results can be achieved. Now, to illustrate this problem the importing of medium-density fiberboard equipment by the Nancha Wood Hydrolysis Plant will be used as an example. The total amount of investment for this project was 68.41 million yuan, of which funds borrowed from abroad accounted for 70.28

percent. The interest on payment for the foreign capital in the loan period was 4.38 million yuan, which converts to 12.26 million yuan in renminbi. After the imported equipment was put into operation, this plant reaped a profit of 16.5 million yuan per annum, paid off the interest on the foreign capital in over 3 years, and within 5 years recouped its total capital outlay. If the equipment is calculated to have a 20-year depreciation, this plant can reap a total profit of 3.3 billion yuan, and interest payments on the loan will only amount to 4.39 percent of its economic earnings, of which 3.71 percent accounts for foreign interest. Over 95 percent of the economic earnings will be income for our nation.

Feasibility Studies Must Be Conducted Before Borrowing Foreign Capital and Attention Must Be Paid to Economic Results

"Hold onto capital and go after profits" is a businessman's saying, and this is also the rationale for utilizing foreign capital. If we use foreign capital we must strive for economic results that will enable us to have attainable profits in the economy. The foreign capital used by the Nancha Wood Hydrolysis Plant in importing medium-density fiberboard equipment accounted for 70.28 percent of its total investment. The decision was not made until after this plant had conducted a feasibility study and concluded that there was a market for its products, there were profits in the market, it could pay off the interest on this loan in a little over 3 years, and there were obtainable profits in the economy. It can be said that whether foreign capital can be used depends upon whether economic results can be achieved by using it.

It Is Important to Have the Concept That Time Is Money

The purpose of our using foreign capital is to develop production and accumulate funds for construction. Thus, so long as construction projects show notable economic results, we cannot be unwilling to utilize foreign capital out of fear of shouldering the burden of interest payments. We must realize that by slowing the rate of construction and letting time drag on our losses will be even larger. For example, the Harbin Electric Wire Plant originally planned to import from the United States key equipment and the patented technique of "dip coating mold-formation methods" for oxygen-free copper rods, and had estimated using approximately \$5 million in foreign exchange. If this project were to go into operation, it would increase its industrial output value by 200 million yuan and earnings by 9 million yuan, and gain \$2.5 million in foreign exchange per annum. Moreover, it would conserve 90 million kwh of electricity and 429 tons of copper per annum. However, it was 4 years, 1977 to 1981, before it was decided to introduce the mode of foreign capital for this project. Although we did not pay a single cent of interest in that 4-year period, we nevertheless lessened the intake of revenue by 36 million yuan, \$10 million, in foreign exchange. Therefore, we certainly must foster the notion that time is money and that wasting time is wasting money, and we must do our best in using foreign capital.

It Is Important to Select an Advantageous Declared Value of Currency

Since the international market practices floating exchange rates, and the range of fluctuation of each nation's currency exchange price is very large,

the risk of fluctuating currency exchange prices in international payments is correspondingly large. How to avoid and lessen the risk of fluctuating exchange prices has become an important topic in international payments. Many factors help to bring about changes in exchange prices. Imbalance in the economic development of each capitalist country, different levels of inflation, deficits and favorable balances in international payments, as well as various political factors, etc, all effect changes in the specific values of currency. Thus, while selecting a declared value of currency for our importing advanced technology and equipment from abroad, we certainly must select a currency that is to our advantage. In general the requirements are: for exports, select a strong currency and for imports select a weak currency or a half and half mixture. The minimal requirement is that the same currency be used for imports and exports so as to avoid losses in our economy owing to floating values of various currencies. Selecting for use a foreign currency that is to our advantage is very important. For example, in 1975 the Heilongjiang Gold Company borrowed \$2.04 million in foreign capital and selected the U.S. dollar as the declared value unit. In the loan period \$1 was equivalent to 1.936 yuan in renminbi and in the payment period in 1979 \$1 was equivalent to 1.503 in renminbi. The devaluation of the U.S. dollar enabled us to gain 1.08 million yuan, which converted to \$720,000. Because of this, annual interest on the loan was only 2.47 percent, 2.57 percent lower than interest rates on domestic loans. Therefore, while using foreign capital we must cautiously make correct forecasts and judgments on developing trends of various currencies. Selecting a currency that is to our advantage is at times much more important than the level of interest rates on loans.

9926
CSO: 4006/422

LABOR AND WAGES

IMPROVEMENTS IN URBAN LIVING STANDARD DISCUSSED

Nanjing XINHUA RIBAO in Chinese 13 Apr 82 p 2

[Article by staff correspondent: "Living Standard of Urban Staff and Workers Shows Marked Improvement in Recent Years"]

[Text] The findings of the provincial bureau of statistics' survey on the income and expenditures of 550 staff and worker households in the five cities of Nanjing, Wuxi, Qingjiang, Xuzhou and Nantong as well as in Yancheng County clearly indicate that since the 3D Plenary Session there has been an increase in the income of urban staff and workers; their standard of living has also improved substantially. The party and government have adopted certain policies and measures that have provided material economic benefits to vast numbers of staff and workers.

Last Year's Per Capita Income Showed a Marked Increase Over That of 1977

In 1981, the average monthly wage for staff and workers in the system of ownership by all the people was 65.86 yuan. Of this, 6.24 yuan was bonus money. The average monthly wage for staff and workers in the system of collective ownership was 50.10 yuan, with 4.46 yuan in bonus money. (The monthly wage includes standard pay, bonuses, nonstaple food subsidies, post allowances, additional wages and above-quota piecework wages.) In staff and worker households, the average monthly per capita real income is 39.60 yuan, an increase of 58.3 percent over the 1977 monthly per capita real income of 25.01 yuan. If we eliminate factors such as price increases, their real income has increased by 45.4 percent.

The primary reasons for the increase in the monthly per capita real income in staff and worker households are the measures adopted by the party and government for raising their standard of living. First, they raised the wage scale for some staff and workers and implemented the system of awards so that each worker's monthly income increased by 35.7 percent over that of 1977. Second, they opened up new avenues of employment and made employment arrangements for unemployed youths. In 1981 there was an average of 2.4 persons employed in each household. The scope of employment has reached 57.2 percent, a growth of 2.5 percent over that of 1977. On average, each employed person was responsible for 1.75 persons (including himself), a reduction of 4.4 percent. Third, owing to the practice of family planning, there has been a

reduction in the family size of staff and workers. In 1981 there was an average of 4.19 persons per household, a decrease of 0.17 persons compared to that of 1977.

Encouraging Changes Have Occurred in Consumption Patterns

In 1981, the household survey showed that average monthly per capita living expenses were 36.73 yuan, an increase of 56.4 percent over that of 1978. Of this, 33.5 yuan was spent on commodity purchases and 3.23 yuan was spent on rent, utilities, miscellaneous schooling expenses, entertainment, medical expenses, haircuts and other noncommercial expenses. Among expenditures on commodity purchases, the proportion of expenditures on food and fuel was low while the proportion of expenditures on clothing and appliances rose. In 1981, the average monthly per capita expenditure on food was 20.55 yuan. The proportion spent on food dropped from 73 percent in 1978 to 61 percent in 1981. The clothing expenditure of 12.09 yuan showed an increase in proportion from 22 percent to 36 percent. The fuel expenditure was 0.76 yuan, a decrease in proportion from 5 percent to 3 percent.

There have been improvements in the quality of foods consumed by families of workers and staff. In 1981, the per capita monthly consumption of grain was 24.5 jin and the per capita monthly consumption of produce was 22.7 jin, both showing a decrease from those of 1978. However, the per capita consumption of vegetable oil of 0.91 jin increased by 0.31 jin, the per capita consumption of fresh eggs of 0.97 jin increased by 0.44 jin, and the per capita consumption of sugar of 0.47 jin increased by 0.17 jin. The per capita consumption of meat of 3.09 jin and the consumption of poultry, fish, seafood, sweets and pastries all showed a sizeable increase.

The Majority of Staff and Workers Own Television Sets

Once staff and workers have satisfied basic consumer needs such as food and clothing, much of their spare money has been used to purchase medium- and high-grade durable consumer goods. In 1981, 550 households purchased a total of 585 durable consumer goods, paying out a total sum of 89,400 yuan or 162 yuan per household. This included 118 bicycles, 25 sewing machines, 103 watches, 94 television sets, 84 electric fans and 38 radios. The quantity of these "6 major items" owned by every 100 households of staff and workers in 1981 as compared to the quantity owned in 1979 is as follows: 135 bicycles, an increase of 28.6 percent; 71 sewing machines, an increase of 24.6 percent; 248 watches, an increase of 18.7 percent; 101 radios, an increase of 68.3 percent; 54 television sets, 2.4 times more than that in 1979; and 58 electric fans, 4.3 times more than that in 1979. In addition, there were varying increases in the number of durable consumer goods such as washing machines, tape recorders, phonographs, sofas and clothes cabinets.

There Have Been Substantial Improvements in Living Conditions

The 1981 household survey showed the per capita living space to be 6.62 square meters, an increase of 0.34 square meters over that of 1977. The per capita

living space in the city of Qingjiang increased by 0.79 square meters over that of the preceding year. In Nantong it increased by 0.96 square meters, in Xuzhou it increased by 0.56 square meters, and in Wuxi it increased by 0.17 square meters. Within that year, 47 staff and worker families moved into new homes and increased their living space. They constituted 8.6 percent of the total number of households surveyed.

Currently Existing Problems in the Living Standards of Staff and Workers

Since the 3D Plenary Session, the party and government have adopted a series of measures to upgrade the standard of living of staff and workers. Although they have achieved excellent results, nevertheless the following problems continue to exist:

1. There has been a decrease in the standard of living in some low income families of staff and workers who work in units without bonuses and in some large staff and worker families with few breadwinners and who have not had their wages readjusted for many years. This is owing to such factors as increased prices. The household survey found that 2.9 percent of staff and worker households spend less than 20 yuan on monthly per capita living expenses. These people are quite badly off.
2. The prices of produce have gone up and there have been numerous complaints by the masses. In the 1981 household survey, the monthly per capita consumption of produce was 22.7 jin, the average price being 0.11 yuan per jin. However, in 1980 the fourth quarter average price was 0.07 yuan per jin so that each person had to spend 0.91 more per month.
3. There is still a sizeable proportion of staff and workers who are without homes or who are living in overcrowded conditions. According to the household survey, 23.7 percent of the families suffered from a housing shortage. Of these, 11.6 percent were living in overcrowded conditions with a per capita living space of only 3.3 square meters; 1.5 percent were families without homes, and 1.6 percent were families in which men and women, old and young all lived together in one room. It is necessary that we continue to put stress on the construction of housing in order to solve the housing shortage for these people as soon as possible.

9864
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TRANSPORTATION

HANGZHOU CANAL PLAN SUBMITTED TO STATE COUNCIL

OW151420 Beijing XINHUA in English 1216 GMT 15 Jul 82

[Text] Hangzhou, 15 Jul (XINHUA)--Hangzhou, the lakeside tourist resort known in China as a "paradise on earth" for its picturesque scenery, will soon launch a 180 million yuan-project to clean two ancient canals fouled by industrial and other pollution.

During an inspection tour of Zhejiang Province last January, Premier Zhao Ziyang promised on behalf of central authorities to allocate 15 million yuan annually for five years for the project to clean the Zhonghe and Donghe canals, both dug during the Tang Dynasty (618-907 a.d.) to link the Qiantang River in Zhejiang with the Grand Canal. The Grand Canal, China's major south-north artery, snakes all the way from Lin'an (Hangzhou) to where the present city of Beijing is. The two canals to be rejuvenated--the Zhonghe, 9.6 kilometers long, and the Donghe, four kilometers--now run through the densely-populated old-town area of Hangzhou city.

Hangzhou will be more attractive when the project is completed, said Chen Anyu, a senior official of the Hangzhou Municipal Government. And several hundred thousand residents in the old-town area will be rid of a great nuisance.

Municipal and provincial authorities have submitted the plan for construction of the project to the State Council for official recognition, according to Chen Anyu. The plan calls for starting a plant three kilometers away from the city to treat industrial waste water that pollutes the Zhonghe and Donghe canals. Meanwhile, work will be done to dredge the canals and build a network of ditches to divert fresh water into them from the Qiantang River, the West Lake or other places.

A boulevard six kilometers long, 60 meters wide with a three-story overpass will be opened along the Zhonghe Canal, Chen Anyu said. Trees will be planted and parks built along both canals. This means that 70,000 square meters will be covered with green.

Special attention will be paid to preserving objects of historical interest, Chen Anyu continued. The most important of these, a bridge and a gate of the city wall built during the last years of the Yuan Dynasty (1279-1368 a.d.) for example, will remain intact. Ancient buildings will be moved elsewhere if they do not stand in the way of the project.

TRANSPORTATION

BRIEFS

YELLOW RIVER HIGHWAY BRIDGE--Jinan, 14 Jul (XINHUA)--A 2,023.4-meter-long prestressed-concrete highway bridge across the Yellow River at Jinan, capital of Shandong Province, opened to traffic today. The new bridge has a central cable suspension span of 220 meters. This is the longest suspension span in Asia. The bridge has four-lane traffic. Heretofore the Yellow River had to be crossed by ferry at this busy transport point and service was often interrupted in the high water and dry seasons. Construction of the bridge started in mid-December 1978. The new structure is the 40th highway bridge crossing the Yellow River, China's second longest river. [Text] [Beijing XINHUA in English 0730 GMT 14 Jul 82 OW]

CHANGJIANG RIVER COAL TRANSPORT--Beijing, 7 Jul (XINHUA)--China plans to build between now and 1985 its first towing fleet specially to transport coal along the Yangtze River from the inland to coastal areas. A coal wharf will be built for the towing fleet at Zhicheng, a riverside town in Hubei Province, Central China, under an agreement signed recently between the Ministry of Coal Industry and the Ministry of Communications. The fleet is expected to transport 1.2 million tons of coal a year and the wharf, to handle 1.5 million tons. The project will tap the Yangtze River's boat-carrying potential by transporting overstocked coal from major mines in western Henan, southern Shanxi, Shaanxi and Guizhou to east China provinces that are badly in need of coal. [Text] [Beijing XINHUA in English 1224 GMT 7 Jul 82 OW]

CSO: 4020/149

Highway Construction

AUTHOR: None

ORG: Department of Transportation, Gansu Province

TITLE: "Summarize the Experience of History to Develop Highway Construction"

SOURCE: Beijing GONGLU [HIGHWAYS] in Chinese No 6, 25 Jun 82 pp 1-4

ABSTRACT: Before the liberation, there were only 3,700 km of barely serviceable highways in all of Gansu. By the end of 1981, there were 9,331 km of major highways, 20,300 km of county and commune highways, and 2,372 km special purpose highways, amounting to 10 fold increase in mileage. The highway construction experience is summarized as follows: (1) Correct handling of relationships between highway construction and agricultural production, between trunk roads and county and rural roads, between road construction and road maintenance, between civilian efforts and public projects, between construction cost and transportation benefits. (2) Unified arrangement throughout the province and divided responsibility among various ranks of the leadership to strengthen management and emphasize engineering quality. (3) Relying mainly upon financial and material capabilities of the province; (4) Strengthen highway management through gradually perfecting a system of regulations, improving the living condition of the workers, taking care of minor repairs, and establishing an idea of being constructive among the officers and workers. Future highway construction plans in the province and some problems are also discussed.

AUTHOR: None

ORG: Bureau of Transportation, Chicheng County, Hebei Province

TITLE: "Implement a System of Economic Responsibility to Improve the Quality of Road Maintenance Work"

SOURCE: Beijing GONGLU [HIGHWAYS] in Chinese No 6, 25 Jun 82 pp 20-22

ABSTRACT: On the basis of the practice of a system of floating wages in 1980, a system of economic responsibility contract for highway maintenance has been introduced for trial implementation. Since then, 87.7 percent of the county's 279,303 km trunk lines have been kept in good repair. The Bureau of Transportation has 88 full-time workers, 81 part-time farmer workers, and 189 representative workers [?], including 20 management officers among them. The bureau has 3 motor vehicles, 17 small tractors, 2 special vehicles, and 33 donkey carts. The system of responsibility with awards and penalties introduced for trial implementation in 1979 and the system of economic responsibility contract introduced for trial implementation in road maintenance work in 1981 are described. Furthermore, the bureau has also launched educational and work competition projects and established technical training courses to last a period of 10 days, immediately following the Spring Festival.

6248

CSO: 4006/169

Statistics

AUTHOR: None

ORG: None

TITLE: "Symposium of Provincial, Municipal, and Regional Heads of Statistical Bureaus Called by the National Bureau of Statistics to Plan the Statistical Work of 1982"

SOURCE: Beijing TONG JI [STATISTICS] in Chinese No 3, 17 Jun 82 pp 16-17

ABSTRACT: The Symposium of heads of bureaus of statistics of provinces, cities, and autonomous regions called by the National Bureau of Statistics was held in Beijing, 23 Mar to 3 Apr, for the purpose of discussing and arranging the statistical work of 1982 in accordance with the series of directives concerning the readjustment of the national economy issued by the central party and the State Council. The paper essentially reports the summarization speech of the Director of the National Bureau of Statistics, LI Chengrui [2621 2052 3843], in which the following 3 problems were emphasized: (1) As the number of statistical workers above the county level has been increased by 3,200 persons, the quality and method of service should also improve and a portion of the manpower should be assigned to the work of preparing for the third national census; (2) The accuracy of data, the technique of sampling, and the method of multiple-aspect check of numerical data must be learned; (3) Training special planning statisticians for people's communes. Finally, LI Chengrui said that statistical work in China has now passed the stage of restoration to reach a stage of development and called upon everyone to summarize domestic experiences and absorb foreign experiences to open a new path of statistical work in China.

AUTHOR: ZHANG Yigeng [1728 0001 5105]

ORG: None

TITLE: "Some Viewpoints of the National Retail Price Index of the Recent Years"

SOURCE: Beijing TONG JI [STATISTICS] in Chinese No 3, 17 Jun 82 pp 20-22

ABSTRACT: Since the Third Party Congress, the State has readjusted prices in a major way several times. The purchase prices of farm and auxiliary products have been raised continuously for several years since 1979, when new grains arrive at the marketplace. In Nov 81, retail prices of cigarettes and liquor were raised while those of synthetic fabrics, television receivers, watches, and radio receivers were marked downward. In the opinion of the author, the general retail price index of a given period of time is an indication of the general tendency of price changes and does not reflect the condition of change of prices of certain goods or types of goods. He explores this viewpoint further with the following: (1) When 1981 is compared with 1980, the price index rises by 2.4 percent but if Dec 81 is compared with Dec 80, the increase is 4.2 percent and if 1981 is compared with 1978, the increase is 10.7 percent. (2) As the general index rises 2.4 percent, the price of consumer goods is up 2.6 percent, that of agricultural production materials is up 1.7 percent, and that

[continuation of TONG JI No 3, 1982 pp 20-22]

foods 3.7 percent, while the price of fresh vegetables is up 10.6 percent. (3) The national general price index is a composite average of price indices of various places of the nation. The range of price increase varies from place to place. For example, it is 9.3 percent in Guangdong, 4.6 percent in Jiangxi, 3.9 percent in Fujian, and 3 percent in Shaanxi. (4) When 1981 is compared with 1980, the total retail sales grow 9.8 percent, i.e. an increase of 21 billion yuan. The real increase of expenditure of rural inhabitants is 51.1 hundred million and that of city dwellers 28.4 hundred million yuan. These facts should all be taken into consideration when the accuracy of the increase of the national retail price index is to be verified. (5) In the past 2 years, some units arbitrarily raised the price of their products, in contradiction to the related regulation of the State. This is also a factor contributing to the opinion of some people who believe that the price index does not reflect the true reality. At present, related departments are adopting counter measures to strengthen market management to resolve this problem.

AUTHOR: None

ORG: The Secretariat, China Statistical Society Liaoning Provincial Statistical Society

TITLE: "The National Symposium of Regional Comprehensive Balancing Statistics Held in Shenyang"

SOURCE: Beijing TONG JI [STATISTICS] in Chinese No 3, 17 Jun 82 pp 42-43

ABSTRACT: The National Symposium of Regional Comprehensive Balance Statistics was held on 17-21 Apr 82 in Shenyang. A total of 106 delegates of statistical workers of 23 provinces, cities, and autonomous regions attended. The symposium received 101 papers and 47 of them were printed and distributed. The goal of the symposium is to promote summarization of experiences of the actual statistical workers and the theoretical statisticians, to discuss the characteristics of regional comprehensive balance statistics, and to improve the accuracy in the calculation of the national income. The following are included among the major subjects discussed: (1) It is neither necessary nor possible for a region to establish a complete and independent people's economic system. (2) The national comprehensive balance should emphasize such strategic problems as the direction, goal, arrangement, ratio, speed, and benefit of national economic and social development. (3) The method of calculating the net product value of the various material-producing departments is in need of revising.

6248

CSO: 4006/170

END